WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Hilltop Addition, Sewer Extension, Greybull, WY

LaVern Nelson, P.E. - John W. Donnell and Associates, ARCHITECT OR ENGINEER: P.O. Box 13, Worland, WY 82401

WATER QUALITY DIVISION REFERENCE NUMBER: 77-250

Jake Strohman, William L. Garland, P.E REVIEWING ENGINEER:

7-18-77 DATE OF REVIEW:

CONSTRUCTION IS NOT AUTHORIZED ACTION:

COMMENTS:

- Upgrade sewer cross over specifications on pg. 3.5 (mark out "above or").
- Lamping or grade and alignment specifications shall be included.
- Furnish existing 8 inch sewer line hydraulic design information.
- Minimum grade for 8 inch diameter sewer lines are .4 feet per 100 feet.

arabel-10/19/28

/ <u>x</u> /	New				
//	Renewal	•	Permit No. 77-	251RRR	
//	Modified		•		
	,i		ter Treatment Plant of Facility)		
	This p	ermit hereby auth	orizes the applican	t:	
	_	Town of Kem (Last)	(First)	(Middle)	
	_	700 Cedar A			_
			(Street or P.O.	Box)	
		Kemmerer (City)	Lincoln (County)	WY 83101 (State)	
to co	nstruct, insta	11, or modify a _	backwash settling	pond location	
facil:	ity located in	Section 12,	T21N; R116W		
			(Legal Description	1)	
in the	e County of	Lincoln	<u> </u>	in the State of	
Wyomi	ng. This perm	it shall be effec	tive for a period o	of <u>two</u> year	:s
from	the date of is	suance of this pe	rmit not to exceed	five (5) years.	
			Authorized by:		
` ` l).	Diam &	Jala Q	Robers	E, Sundin	
Wate	Administrato er Quality Div	1 1		irector Environmental Qual	ity
				-	
	Octobon 1	1 1070			

Date of Issuance

<i>i</i> —/	New	•		
/ <u> </u>	Renewal		Permit No	77-251RR
<u> </u>	Modified			
·				
	K	emmerer Water Treatmen (Name of	nt Plant Facility)	
	This	permit hereby author	izes the appi	Licant:
		Town of Kemmerer (Last)	(First)	(Middle)
		700 Cedar Avenue		
		700 dedai 714 enac	(Street or	P.O. Box)
		Kemmerer	Lincoln	Wyoming 83101
	·	(City)	(County)	(State)
to,co	nstruct, ins	tall, or modify a	Water Treatme	ent Plant
facil	ity located	in_Section 12, T21N,	R116W Legal Descri	ption)
	- 5		Degat pepert	, in the State of
	e County of			
Wyomi	ng. This pe	rmit shall be effecti	ve for a per	iod of <u>2</u> years
from	the date of	issuance of this perm	it not to ex	ceed five (5) years.
,				
			Authorized	by:
(1)	Qia	ala 2	Rober	16, Seender
	Adminis Water Qualit		Wyoming Dep	t. of Environmental Quality
	February 1	7, 1978		
	Date Johnson-Ferm Kemmerer, Wy		TTN: Dale C	rank, P.E., P. O. Box 631,

/ <u>x</u> /	New			
//	Renewal		Permit No	77-251R
//	Modified			
		Kemmerer Water T (Name	reatment Plant of Facility)	
	This	permit hereby auth	norizes the applic	ant:
		Town of Kemmere	r	
		(Last)	(First)	(Middle)
		700 Cedar Avenu	е	
			(Street or P.C	D. Box)
		Kemmerer	Lincoln	Wyoming 83101
		(City)	(County)	(State)
		all, or modify a _		Plant
facili	ty located i	n Section 12, T21	N, R116W	
			(Legal Descripti	on)
in the	County of _	Lincoln		, in the State of
Wyomin	g. This per	mit shall be effec	ctive for a period	of 2 years
from t	he date of i	ssuance of this pe	ermit not to excee	ed five (5) years.
			Authorized by:	
rja T	Administ	alone fator	<u> Detarr</u>	- E. Lundin Director
, W	ater Quality	JDivision	Wyoming Dept.	of Environmental Quality
		t 30, 1977		
cc: i	Johnson-Ferm	of Issuance elia and Crank, Ind	c., P.O. Box 631,	Kemmerer, WY 83101

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Town of Kemmerer, Water Treatment Plant Expansion, Kemmerer, WY,

Lincoln Co.

ARCHITECT OR ENGINEER: Dale Crank, P.E. - Johnson-Fermelia and Crank, Inc., P.O. Box 631, Kemmerer, WY 83101

WATER QUALITY DIVISION REFERENCE NUMBER: 77-251

REVIEWING ENGINEER: David W. Hill, Don Armstrong, P.E., William J. Garland, P.E.

DATE OF REVIEW: August 4, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS: 1) Please have owner or owners designated representative fill out and submit two copies "Application for Permit to Construct, Install...."

- 2) A U.S. Army Corps of Engineers Dredge and Fill Permit may be needed for the intake structure work. Please contact the Corps. State certification may also be needed for this work. (Enclosed).
- 3) The outside door (#4) near the chlorination room should swing the other direction. This is a precaution which is needed to prevent an operator from walking into the chlorination room exhaust flume in an accident.
- 4) A chlorine leak detector is needed in the chlorination room.
- 5) Where will the respiratory protection equipment be stored? Will a self contained unit be available?
- 6) What is the capacity of the chlorination room exhaust fan. At least one air change per minute is required.
- 7) Where will the spare chlorination cylinders be stored?
- 8) The cast iron pipe and fittings, ductile iron pipe and steel pipe should conform to the lastest editions of the various AWWA or ANSI Standards.
- 9) Will there be sufficient room for a tractor or forklift between the locker room and the backwash suction pump and piping? We would encourage another garage door in the north part of the building. The backwash piping should be protected from possible vehicle accidents.

Town of Kemmerer, Water Treatment Plant Expansion, Kemmerer, WY, Lincoln Co.

77-251

- 10) We highly recommend that a course bar screen precede the 4 inch mesh screen.
- 11) At least two ¼ inch mesh screens are needed. One can be in use while the other is being cleaned.
- 12) How will the wet well sump at the intake structure be cleaned.
- 13) The manhole to the valve pit at the clearwell should have a cover which overlaps the framed opening and extends down around the side at least two inches.
- 14) Please supply details of the backwash water settling pond effluent line at the river. Steps should be taken to prevent erosion at this outfall.
- 15) Please state the proposed weir loadings for the settling basins.
- 16) We assume that this expansion is designed at the same loadings as the present plant. Has the present plant been able to consistently produce a water with a tumbidity of less than 1 JTU as required by P.L.:93-523?

DWH/jo Enclosures

/ <u>X</u> /	New			
//	Renewal		Permit No	77-252R
//	Modified			
		Arnold Trail	er Court e of Facility)	
		·		
	This p	ermit hereby aut	chorizes the application	ant:
		·		
		Arnold	Tom	(Middle)
		(Last) c/o of Plain P.O. Box 727	Tom (First) s Engineering	(Middle)
	_		(Street or P.O	. Box)
		Newcastle	Weston	Wyoming 82701
		(City)	(County)	(State)
	ity located in	Section 30		
			(Legal Descripti	on)
in th	e County of	Weston		, in the State of
Wyomi	ng. This perm	it shall be eff	ective for a period	ofyears
			permit not to excee	
			Authorized by:	
(D	00:00	a Dan D	Lour	E. Sundin
	Administr Water Quality	ator Division	Wyoming Dept.	Director of Environmental Qualit
	waret Anattra	- 1		-
	Julv	27, 1977		
		of Tesuance		

/ <u>x</u> /	New			
//	Renewal	:	Permit No. 77	7-253, Ref. 76-347
//	Modified			
		Resubdivision of	Tract E-Wagensen	Addition
		(Name	of Facility)	
	This	permit hereby aut	horizes the applic	eant:
		Memanamen	James	
		(Last)	(First)	(Middle)
		408 North Broo		
			(Street or P.(). Box)
		Gillette	Campbell	Wyoming 82716
		(City)	(County)	(State)
			Motor Diotost	
to cor	nstruct, inst	tall, or modify a	water bistribut	ion
facili	ity located	in the City of G	,	
1			(Legal Descripti	ion)
in the	e County of _	Campbell		_, in the State of
Wyomin	ng. This per	rmit shall be effe	ctive for a period	i of <u>2</u> years
		issuance of this p		-
			-	• • •
				•
			Authorized by	:
		_	. / 1	€
100	mº Q	(10. 8	The trans	- Elman
	Adminis	trator		Director
Ţ	Water Quality	y Division	Wyoming Dept.	of Environmental Quality
	August	t 4, 1977		
**************************************	Date	of Issuance	· 	

cc: Plains Engineering, P.O. Box 2020, Gillette, Wyoming 82716

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT:

Halliburton Services, Evaporation System and Septic System.

Evanston, WY, Uinta Co.

ARCHITECT OR ENGINEER:

John A. Proffit, P.E. - Uinta Engineering and Surveying,

P.O. Box 746, Evanston, WY 82930

WATER QUALITY DIVISION REFERENCE NUMBER:

REVIEWING ENGINEER:

David W. Hill, William L. Garland, P.E.

DATE OF REVIEW: August 5, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- Please have owner or owners designated representative fill out and submit two copies "Application for Permit to Construct, Install,"
- Provide fencing details for fence around evaporation pit.
- . 3) Please provide details of the oil trap and waste pit.
 - Please submit septic tank details,
- . 5) Design data for the septic system is needed (i.e. - design population, design flow).

DWH/jo

Enclosures - "Application for Permit to Construct, Install,"

/ <u>x</u> /	New	ı	7*	7-254R	
//	Renewal		Permit No		
//	Modified				
		Halliburto:	n Services		
		(Name o	f Facility)		
	This	permit hereby autho	rizes the applic	ant:	
	•	Halliburton Serv	ices		
		(Last)	(First)	(Midd	le)
		P.O. Box 805			
			(Street or P.O	. Box)	
		Evanston	Uinta	Wyoming	82930
		(City)	(County)	(State)	
	struct, inst	Section 23, T15	N, R120W		uok Wash Wastewate
		Uinta	(Legal Descripti		_
	County of _			_	te of
Wyomin	ng. This per	rmit shall be effect	ive for a period	of2	years
		issuance of this per	•		ears.
	···				-
			Authorized by:		
سكن	Ola C	Jo Jo D	Robert	E. Sun	din
V	Water Quality		Wyoming Dept.	of Environme	ntal Quality
	C	otober 24, 1977			
	Date	of Issuance			

cc: Uinta Engineering and Surveying, P.O. Box 746, Evanston, WY 82930 Attention: John Proffit, P.E.

MEMORANDUM

T0:

The File

FROM:

Al Berreth and

SUBJECT:

77-255R/Cedar Cliff Estates

DATE:

August 18, 1981

On June 3, 1981, a visit to Cedar Cliff Estates was made to determine the possibility of a violation of Wyoming Water Quality Rules and Regulations. A search of the records indicated that the above referenced permit had been issued. The inspection revealed that the subdivision had been constructed as per the permit except for the possibility of fire hydrants. A letter was written to Mr. Rapp and his response seemed adequate.

AB/ch 8/18/81

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Cedar Cliff Estates, Water System, Sweetwater County, Wyoming

ARCHITECT OR ENGINEER: James C. Kaiserman - Genge/Call Engineering, Inc.

2211 South 300 West, Salt Lake City,

Utah 84115

WATER QUALITY DIVISION REFERENCE NUMBER: 77-255

REVIEWING ENGINEER: David W. Hill, Don Armstrong, P.E., Widliam L. Garland, P.E.

DATE OF REVIEW: August 10, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS: 1) Please have owner or owners designated representative fill out and submit two copies "Application for Permit to Construct, Install...."

- 2) Two copies of all plans and specifications need to be submitted to us. One set will be returned to you upon our authorization of the project.
- 3) Complete detailed specifications are needed. If the Flaming Gorge Water System, Inc. specifications are to be used, please refer to this on the set of plans.
- 4) Four inch lines are the minimum size allowed. This includes lines into cul-de-sacs.
- 5) All PVC pipe must meet AWWA C900-75.
- 6) Disinfection of the distribution system should proceed according to AWWA C601-68. Include this in the specifications.
- 7) All gate valves shall meet AWWA C500-71. Include this in the specifications.
- 8) The fire hydrants used shall meet AWWA Standards. Include this in the specifications or addendum.
- Stop and waste valves are not allowed in the blow-offs.
- 10) A "Permit to Construct" will not be issued until a the proper authorization is obtained from the Public Service Commission.

DWH/jo Enclosure

cc: William M. Briggs, Flaming Gorge Water System, Inc., Manial, Utah 84046

/ <u>X</u> /	New			
.//	Renewal		Permit No	77-255R
//	Modified		•	
	Fla	aming Gorge Water S	ystem, Inc Ced	dar Cliff Estates
		(Name o	f Facility)	
	This p	ermit hereby autho	rizes the applica	ant:
		Briggs	William	M
	_	(Last) c/o Genge/Call E 2211 So. 300 W.	(First) ngineering, Inc.	(Middle)
			(Street or P.O.	. Box)
		Salt Lake City		Utah 84115
	_	(City)	(County)	(State)
to cor	nstruct, insta	all, or modify a	Water System	
	ty located in	C+3 01 0 00		
			(Legal Description	on)
in the	County of	Sweetwater		, in the State of
Wyomin	ng. This perm	nit shall be effect	ive for a period	of years
		ssuance of this per		
•				
•			Authorized by:	
-	Administr Vater Quality		Bobers 6	Director of Environmental Quality
¥	acci quarity	22120		
	Sep	tember 15, 1977		
	-	of Issuance	<u> </u>	

/ <u>X</u> /	New			
//	Renewal	3	Permit No	256
//	Modified			
		_South Worland Wate		
			Facility)	
	This	permit hereby author	cizes the applican	it:
		South Worland Wa (Last)	ater Users Corp, (First)	(Middle)
		c/o John W. Doni P.O. Box 13		(iiiddie)
		1.0. BOX 13	(Street or P.O.	Box)
		Worland	Washakie	Wyoming 82401
		(City)	(County)	(State)
to con	struct, ins	tall, or modify a	Water System Exter	sion *
	ty located :	Tn 1070 CEL CI	E ₄ , Sec. 1, T46N,	
TUCTIT	cy 10 0 0000		(Legal Description	1)
in the	County of _	Washakie	,	in the State of
Wyomin	g. This per	rmit shall be effect:	ive for a period o	of 2 years
from t	he date of :	issuance of this perm	mit not to exceed	five (5) years.
			Authorized by:	
(0)	00:2	(Va. Oa. I	Delace.	E Lunia
	Adminis			Director
W	ater Qualit	y D iy ision	Wyoming Dept. of	E Environmental Quality
	August	t 4, 1977		
		of Issuance		•

$\frac{1}{\sqrt{\chi}}$ New			
// Renewa	a1 ,	Permit No.	77-257
/	-	•	
// 115d211		·	
	S & J #1 & #2 E (Name This permit hereby auth	of Facility)	ant:
' '			
ż . .	Sasser	Stephen	F
	(Last)	(First)	(Middle)
	513 N. Lennox		
		(Street or P.C). Box)
	Casper	Natrona	Wyoming 82601
	(City)	(County)	(State)
to construct;	, install, or modify a $_$	Septic	
	Soction 6 Too	BN, R79W	
facility loca	ated in	(Legal Descripti	on)
in the County	y ofNatrona		, in the State of
Wyoming. Thi	is permit shall be effec	tive for a period	ofyears
	e of issuance of this pe		•
cc: Nix Ande			
		Authorized by:	
		• .	- 4
(e) elea	I Chila Q	Jane 1	a Edundan
Adı Water Qı	ninistrator uality Division	Wyoming Dept.	Director of Environmental Quality

August 11, 1977

Date of Issuance

/ <u>x</u> /	New			
/ <u></u> /	Renewal		Permit No.	77258
/ <u> </u>	Modified	*		
′′	110022220			
		ecker Lease Bldg. (Name	, B & B Subdivisio of Facility)	n Ot #7
	This p	ermit hereby aut	horizes the applic	ant:
	• :			
	·, _	Sasser (Last)	Stephen (First)	F. (Middle)
	_	513 N. Lennox	(Street or P.C). Box)
		Casper (City)	Natrona (County)	Wyoming 82601 (State)
		(5/	(00000)	
to con	struct, insta	all, or modify a		
	struct, insta	all, or modify a	Septic /	Lon)
facili		all, or modify a	Septic /	ion) , in the State of
facili	ty located in	Section 6, Ta	Septic /	, in the State of
faciliin the	ty located in County of g. This perm	Natrona	Septic / B7W, R79W (Legal Descripti	, in the State of
in the Wyomin from toc: N	ty located in County of g. This perm he date of is ix Anderson	Natrona Natrona section 6, T3	Septic 2 87W, R79W (Legal Description of the content of the cont	, in the State of
in the Wyomin from toc: N	ty located in County of g. This perm he date of is ix Anderson	Natrona Natrona section 6, T3	Septic 2 87W, R79W (Legal Description of the content of the cont	, in the State of d ofyears ed five (5) years. David, Casper, WY 82601
in the Wyomin from toc: N	ty located in County of g. This perm he date of is ix Anderson	Natrona Natrona section 6, T3	Septic 3 87W, R79W (Legal Description of the period of the exceeding the second of the exceeding t	, in the State of d ofyears ed five (5) years. David, Casper, WY 82601
in the Wyomin from to CC: N	ty located in County of g. This perm he date of is ix Anderson	Natrona Natrona Natrona Section 6, T3 Natrona Natrona This shall be effered by the second of this properation of the second of the secon	Septic 2 37W, R79W (Legal Description of the period of the excess of the formula of the excess of the formula of the excess of the formula of the excess o	, in the State of d ofyears ed five (5) years. David, Casper, WY 82601

August 11, 1977 Date of Issuance

/ <u>x</u> /	New					
//	Renewal	ž	Permit No	77-259		
//	Modified	•				
	•	Asbell Ado	dition			
	(Name of Facility)					
	This permit hereby authorizes the applicant:					
	1 2					
		City of Casper				
		(Last) c/o Casper Board 136 W. 8th Stree		(Middle) ities		
			(Street or P.C). Box)		
		Casper	Natrona	Wyoming 82601		
		(City)	(County)	(State)		
to con	struct, inst	call, or modify a	Sewer Line R	elocation		
facili	ty located i	in the City of Casp				
		((Legal Descripti	(on)		
in the	County of _	Natrona		, in the State of		
Wyomin	g. This per	rmit shall be effecti	ive for a period	of 2 years		
from t	he date of i	issuance of this perm	nit not to excee	ed five (5) years.		
cc: N	ix Anderson			<u> </u>		
	•		Authorized by:	:		
<u>W</u>	Diam!	Andre Q.	1/2-1-01	i E Landie		
W	Administ Jater Quality	t t	Wyoming Dept.	Director of Environmental Quality		

August 11, 1977

Date of Issuance

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Butcher Subdivision, City of Gillette

ARCHITECT OR ENGINEER: R. H. Krum, C.S.S.A., 510 S. Gillette Ave.,

Gillette, WY 82716

WATER QUALITY DIVISION REFERENCE NUMBER: 77-260

REVIEWING ENGINEER: Dan H. Kim, William L. Garland, P.E.

DATE OF REVIEW: August 3, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS: 1) Should provide alignment specifications, specifications concerning excessive side fill pressures and ovalation of the pipe. Specifications on placing the pipe, relieving the bells, placing the backfill material, etc.

- 2) Should provide material specifications, i.e. valves, etc.
- 3) Provide exfiltration specifications.
- 4) Infiltration and exfiltration tests should be for each section of pipe. i.e. manhole to manhole.
- 5) Sewer PVC pipe should meet ASTM 3033 or 3034 specifications.
- 6) Water line and sewer line crossing specifications should conform to Section 15, Chapter III Regulations. Sewer lines as shown would require the sewer service taps to be made with a pipe that would meet water line specifications. If the line is to be constructed as shown. Please indicate the sewer taps that would require the special conditions.
- 7) What is carefully compacted backfill?
- 8) This cannot be considered a final review.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Butcher Subdivision - Gillette, Wyoming

ARCHITECT OR ENGINEER: R. H. Krum, C.S.S.A., 510 S. Gillette Ave., Gillette, WY 82716

WATER QUALITY DIVISION REFERENCE NUMBER: 77-260R

REVIEWING ENGINEER: Dan H. Kim, William L. Ganland

DATE OF REVIEW: 9-15-77

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1. PVC water pipe specifications call for a pipe with SDR 21, 200 psi. This is not AWWA C-900 designated pipe.
- 2. The specifications of water main sterilization seem to conflict with AWWA C601-68 specifications. AWWA specifications require to contain no less than 25 mg/l chlorine throughout the length of the main after 24 hr. period.
- 3. ASTM designation D3034 73 for PVC sewer pipe is outdated.
- 4. Wye and tee branches are concurrent in your specifications. Only Wye branches are acceptable.
- 5. Your specifications indicate the waterlines will be 5' below ground and measured depth of sewer line is 5 feet or less. Do sewers always cross under waterlines? Will 18" vertical separation for crossing be obtained between sewer lines and water service lines serving lots 2, 3 & 4? Your typical water service connection detail drawing also calls for the depth to be at least 5 feet.
- 6. Typical cleanout details should be provided.
- 7. Should provide specifications concerning excessive side fill pressures and ovalation of the pipe and concerning relieving the bells.
- 8. This cannot be considered a final review.

/ <u>X</u> /	New	·		
//	Renewal		Permit No.	77-260RR
//	Modified			
			Subdivision e of Facility)	
	This	permit hereby aut	thorizes the appli	cant:
		Butcher	Arley	
	-	c/o ^{Last)} S.A. 510 S. Gillette	(First)	(Middle)
	· -		(Street or P.	0. Box)
		Gillette	Campbell	Wyoming 82716
	-	(City)	(County)	(State)
		all, or modify a		on & Sewer Collection
.ac.	, 1000000		(Legal Descript:	ion)
in the	County of _	Campbell		_, in the State of
Wyomin	g. This perm	nit shall be effe	ective for a period	d of <u>2</u> years
from t	he date of is	ssuance of this p	ermit not to exce	ed five (5) years.
	·		Authorized by	:
<u>.</u> ون	lean RO	Jalan Q	Lobers	- E Lundin Director
W	Administ Vater Quality	()	Wyoming Dept.	of Environmental Quality
	October	13, 1977		
	. Date o	of Issuance		

/ <u>X</u> /	New			
//	Renewal		Permit No	77_261
/ /	Modified	.	•	77 201
·'				
		Drilling N (Name	Mud, Inc. of Facility)	
	This r		• /	
	INIS 1	ermit hereby auti	norizes the applica	int:
	1.			
	·, _	Reid	John	Α.
		(Last)	(First)	(Middle)
		P.O. Box 2831		D- \
		C= ====	(Street or P.O.	·
	·	Casper (City)	Natrona (County)	Wyoming 82601 (State)
			((5:400)
to con	struct, insta	all, or modify a _	Wastewater Disp	oosal
facili	ty located in	Section 20, T	34N, R79W	· · ·
	j		(Legal Descriptio	n)
in the	County of	Natrona	,	in the State of
Wyomin	g. This perm	it shall be effec	tive for a period	of2 years
			ermit not to exceed	
	ix Anderson	,	not to execte	1200 (3) yadab.
h	Western Constr	uction Company, E	Box 930, Casper, WY	82601
			Authorized by:	
- ~ ~	0/		17,	E. J
<u>) (</u>	Mica XJ Administr	Jala Q	- Herbara	1 to Mesonday
Wa	ater Quality 1	1 \		Director f Environmental Quality
		~		,

August 11, 1977 Date of Issuance

/ <u>X</u> /	New			
· / <u>_</u> /	Renewal		Permit No	77-262
//	Modified			
		Husky Oil (Company	
		(Name	of Facility)	
	This	permit hereby auth	orizes the appli	icant:
		Husky Oil Compa	ny	<u>-</u>
	•	(Last)	(First)	(Middle)
		404 N. 31st		
		•	(Street or P.	.O. Box)
		Billings		Montana
		(City)	(County)	(State)
to cons	truct. inst	all, or modify a _	Wastewater Dis	sposal
		nTract 50, T53N		
facilit	y located l	1 11400 30; 1331	(Legal Descript	ion)
in the	County of	Park		, in the State of
	_	mit shall be effec	tive for a perio	od of 2 years
from th	e date of i	ssuance of this pe	rmit not to exce	eed five (5) years.
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,			Authorized by	7:
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V.	Administ ter Quality	X 1	Muoming Dont	Director of Environmental Quality
wa	ter quarrty	DEVISION	wyoming bept.	. Of Bilvilonmental quarter
		•		
	<u>-</u>	14, 1977	- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	
00. Tu		of Issuance	, 1520 Cadu No.	oming 00114
cc: Eng	ineering As	sociates, P.O. Box	(1539, Coay, Wy	oming 82414

/ <u>X_</u> /	New			
//	Renewal	,	Permit No.	77-263
<u> </u>	Modified	•	· <u> </u>	
′—′				
		Glen Bennett Trail (Name	er Park of Facility)	
	Thá c	·	•	oant.
	TIELS	permit hereby auth	norizes the appir	cant.
	• 1			
		Bennett	Glen	R.
		(Last)	(First)	(Middle)
		2724 East 10th	(Street or P.	O Roy)
				O. BOX)
		Casper (City)	Natrona (County)	Wyoming 82601 (State)
	ity located	tall, or modify a _ inSection 29,	T34N, R79W	
			(Legal Descript:	ion)
in the	e County of	Natrona		_, in the State of
Wyomir	ng. This pe	rmit shall be effe	ctive for a period	d of2years
from t	the date of	issuance of this pe	ermit not to exce	ed five (5) years.
	Nix Andersor			
		cterson, P.E., 437	Spruce, Casper, Wy	oming 82601
		ter & Sewer, lls, WY 82644	Authorized by	:
	_	0-		****
00	00	(h) 0		1. 1. E. L. L.
	Adminis	4 3		Director
V	Water Qualit	y Division	Wyoming Dept.	of Environmental Quality
•	Аис	ust 12. 1977 ·		

Date of Issuance

/ <u>X</u> /	New			
//	Renewal	•	Permit No. 77	7-264
//	Modified			
		Branding Iron Sup	oper Club	
		(Name	of Facility)	
	This	permit hereby auth	orizes the applicar	it:
		Katsimanis	Nick	66.217
		(Last) c/o E. C. Lenhart 632 S. David	(First) t, P.E.	(Middle)
			(Street or P.O.	Box)
	·	Casper	Natrona	Wyoming 82601
		(City)	(County)	(State)
facili	ity located :	inSection 28, T33	R80W (Legal Description	n)
in the	e County of _	Natrona	,	in the State of
Wyomir	ng. This per	rmit shall be effec	ctive for a period (of 2 years
from t	the date of :	issuance of this pe	ermit not to exceed	five (5) years.
NOTE	: ENSURE BE	D BOTTOM IS LEVEL.		
			Authorized by	
			Authorized by:	9
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7	Adminis Water Qualit			Director f Environmental Qualit
	А	ugust 2, 1977		
	Date	of Tssuance		

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: North Fork Acres, Domestic Water System, Sec. 33, T34N, R100W, Fremont County, Wyoming

ARCHITECT OR ENGINEER: J. C. Cometto, P.E., 340 Hedges, Lander, Wyoming 82520

WATER QUALITY DIVISION REFERENCE NUMBER: 77-265

William S. Garland

REVIEWING ENGINEER: David W. Hill, William L. Garland, P.E.

DATE OF REVIEW: August 8, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS: 1) Please have owner or owners designated representative fill out and submit two copies "Application for Permit to Construct, Install...."

- 2) Please submit a chemical and biological analysis of the spring water,
- 3) Upon completion of construction and the starting of hookups,
 North Fork Acres must get on our monthly bacteriological sampling
 program. Please contact Mr. Robert Pinther of this office
 at this time.
- 4) Please submit complete design criteria (i.e. population, per capita flow, peak flow, reservoir size, etc).

SPRING

- 5) Please indicate of what material the perforated pipe is made of. If plastic, it must be NSF approved.
- 6) Please submit contour line drawing for area around spring.
 A diversion ditch for surface runoff around the spring area is needed.
- 7) A fence is needed around the spring area. Please provide details.
- 8) Provide overflow details from the spring reservoir. The overflow end must be screened and must be at least two feet above the spill line of the receiving ditch.
- 9) The reservoir must have a drain. Supply details. The same criteria as in 7 above applies to the reservoir drain.

77-265

- 10) Details are needed of the manhole entrance to the reservoir.
- 11) Spring disinfection procedures are needed.

Water Lines

- 12) All main lines in a subdivision with permanent housing must be a 4 inch minimum.
- 13) All four inch or larger PVC pipe must meet AWWA C900-75. PVC pipe Class 160 psi, ASTM D-2241 does not meet this standard.
- 14) Please submit thrust blocking details.
- 15) Submit flushing valvebdetails. Addition
- 16) Please show locations of all gate valves on the water system.
- 17) A compaction specification is needed for the backfilling criteria.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: North Fork Acres, Domestic Water System, Sec. 33, T34N, R100W,

Fremont County, Wyoming

ARCHITECT OR ENGINEER: John Cometto, P.E. - 340 Hedges, Lander, Wyoming 82520

WATER QUALITY DIVISION REFERENCE NUMBER: _77-265,

REVIEWING ENGINEER: David W. Hill, Don Armstrong, P.E., William L. Garland, P.E

DATE OF REVIEW: August 29, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

SPRING - Storage Reservoir

- 1) The plastic 10 ml. liners shall be NSF approved.
- The foam insulation cannot be used in the actual spring area. It may be used over the solid pipe from the spring to the storage reservoir.
- 3) Spring disinfection procedures are needed.
- 4) The surface water drain over the spring area must have a end which is screened and discharges at least two feet above the spill line of the receiving ditch.
- 5) Please enclose manufacturers details of chlorinator.
- 6) Thirty minutes contact time with chlorine must be provided for proper disinfection of groundwater. Will This be provided?
- 7) Please indicate size of hydropnuematic tanks and enclose manufacturers information.
- 8) The manhole to the reservoir must be framed at least four inches and preferably six inches above the floor. The manhole must be fitted with a solid watertight cover which overlaps the framed opening and extends down around the frame at least two inches. It should also be hinged and locked!
- 9) The reservoir vent must be at least two to three foot above the ground.
- 10) Details of the overflow from the reservoir are needed. The overflow end must be screened and must be at least two feet above the spill line of the receiving ditch.

North Fork Acres, Domestic Water System, Sec. 33, T34N, R100W, Fremont County, Wyoming

77-265

11) The reservoir must have a drain. The drain line must meet the same criteria as above.

WATER DISTRIBUTION SYSTEM

- 12) The drain lines from the flushing valves shall terminate at least one foot above the ground level. It shall terminate in a 90° bend and be screened.
- 13) Thrust blocking details are still needed (size of block, strength of concrete, etc.)
- 14) Please show on the plans where gate valves are located. Valves are needed to isolate the different lines in case of breaks, etc.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: North Fork Acres, Domestic Water System, Section 33, T34N, R100W,

Fremont County, Wyoming

ARCHITECT OR ENGINEER: John Cometto, P.E. - 340 Hedges, Lander, Wyoming 82520

WATER QUALITY DIVISION REFERENCE NUMBER:

David W. Hill, Don Arpstrong, P.E., William L. Garland, P.E.

DATE OF REVIEW: October 3, 1977

REVIEWING ENGINEER:

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- The proposed manhole cover for the water storage reservoir is unacceptable. It must be fitted with a solid, watertight cover which overlaps the framed opening and extends down around the framed opening at least two inches. It should also preferably be locked and hinged.
- 2) Our calculations indicate the hydropnuematic tanks are too small. A high degree of pump cycling would take place at peak flows.
- 3) If calcium hypochorite is to be used, we highly recommend the use of a separate water-calcium hypochorite mixing tank. Calcium hypochorite reacts with the hardness in the mixing water and forms a precipitate which clogs hypochlorinators. The water-calcium hypochorite should be allowed to settle for 12-24 hrs. after which the clear liquid on top can be gently drawn off into another tank for use with the hypochlorinator.

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/ <u>X</u> /	New	1				
//	Renewal		Permit No	77-265RRR		
//	Modified					
		North Fork	Acres Water System	1		
		(Name	of Facility)			
	This	permit hereby auth	horizes the applic	ant:		
		Birchfield	Willie	L.		
		Chambers	Dale	Н.		
		(Last)	(First)	(Middle)		
		685 North 9th				
	(Street or P.O. Box)					
		Lander	Fremont	Wyoming 82520		
		(City)	(County)	(State)		
	ity located i	sall, or modify a _ Section 33, in				
•	•	<u>-</u>	(Legal Descripti	on)		
in the	e County of _	Fremont		, in the State of		
Jyomin	ng. This per	mit shall be effec	ctive for a period	of 2 years		
from 1	the date of i	issuance of this pe	ermit not to excee	d five (5) years.		
		. •				
			Authorized by:			
<u>يار</u>	Oliver J.	Jala 2	Rober	v E. Lunder		
Ţ	Administ Water Quality		Wyoming Dept.	Director of Environmental Qualit		
	November 3	3, 1977				
	Date	of Issuance				

cc: John Cometto, 340 Hedges, Lander, WY 82520

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Kerr-McGee, Section 28-33 Mine Treatment System, Sec. 33, T37N,

R73W, Converse Co., WY

ARCHITECT OR ENGINEER: None Listed

WATER QUALITY DIVISION REFERENCE NUMBER: 77-266

REVIEWING. ENGINEER: Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: 7-12-77

ACTION: CONSTRUCTION NOT AUTHORIZED

COMMENTS: 1. Give details and specifications of outfall and overflow structures.

- 2. Give material specifications for piping and treatment plant.
- 3. Need the seal or signature of the designing engineer licensed to practice in the State of Wyoming.
- Ponds should be fenced with warning signs noting nature of the facility.
- 5. Furnish design information. Will 14 hours detention time give required settling? How do you plan clean and disposal of sludge buildup? Can you bypass one pond and still obtain required settling?

/ <u>X</u> /	New	**************************************		
//	Renewal		Permit No	77-266R
//	Modified			
	Kei	r McGee - Sec. 28	3-33 Mine Treatme	ent System
	_		of Facility)	
	This	permit hereby auth	norizes the appl	icant:
		Kerr McGee Nu	clear Corporatio	on
	-	(Last)	(First)	(Middle)
		P.O. Box 188		
	-		(Street or P	.0. Box)
		Glenrock	Converse	Wyoming 82637
	- -	(City)	(County)	(State)
	; ·	all, or modify a _ Section 33, T	Mine Treatment	
raciti	ity located i	1	(Legal Descrip	tion)
in the	e County of	Converse		, in the State of
Wyomin	ng. This perm	mit shall be effec	ctive for a perio	od ofyears
				eed five (5) years.
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		1.		
			Authorized b	y:
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Į.	Administ: Vater Quality		\ Wyoming Dept	. of Environmental Quality
	Septembe	r 15, 1977		
	Date	of Issuance	·· ·	

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Clearview Acres Subdivision, Sewage Disposal System, Sweetwater County

ARCHITECT OR ENGINEER: William F. Carder, P.E. - Bennett-Carder and Associates,

Inc., P.O. Box 1324, Rock Springs,

_WY 82901

WATER QUALITY DIVISION REFERENCE NUMBER: 77 267

REVIEWING ENGINEER: David W. Hill, Don Armstrong, P.E., William L. Garland, P.E

DATE OF REVIEW: August 12, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS: 1) Please have owner or owners designated representative fill out and submit two copies "Application for Permit to Construct, Install...."

- Need complete design data for the lagoon system (i.e. population served, design flow, detention times.)
- Need compaction specifications for #3 pond embankments.
- 4) Please discuss the manner in which the discharge will be disinfected to insure compliance with the NPDES permit fecal coliform limitation.



Department of Environmental Quality Water Quality Division

HATHAWAY BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

August 22, 1978

Bennett-Carder & Associates, Inc. P. O. Box 1324 Rock Springs, WY 82901

RE: Clear View Acres Wastewater Lagoons, 77467K

ATTN: Harry J. Kessner, P.E.

Dear Mr. Kessner,

A "Permit to Construct" has been issued to Mr. James Martin for installation of the surface aerators in cell #1 and #2. A permit will not be issued to Mr. Martin for the third cell since it is already constructed. This letter will give "tacit" authorization for the "as built" third cell.

Our calculations indicate that the system as designed will be marginally acceptable to meet the requirements of the discharge permit at best. The available detention time is only marginally acceptable for cold winter conditions. More detention time is recommended.

However, a permit has been issued and Clear View Acres will be expected to meet the requirements of the discharge permit.

If any question comes up, please feel free to contact me.

Sincerely,
David WHA

David W. Hill

Environmental Engineer

cc: James L. Martin, P. O. Box 1540, Rock Springs, WY 82901

DWH/clf

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Casper Water Treatment Plant Extension, Casper, WY

ARCHITECT OR ENGINEER: None Listed - Black & Veach, 12075 East 45th Avenue,

Suite 333, Denver, CO 80239

WATER QUALITY DIVISION REFERENCE NUMBER: 77-268 Colicens

REVIEWING ENGINEER: Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: 8-30-77

ACTION: CONSTRUCTION IS NOT AUTHORIZED

COMMENTS:

- State law requires plans and specifications have the seal or signature of engineer licensed to practice in the State of Wyoming.
- 2. What is the source of water for 4" supply line to traveling screen at raw water intake?
- 3. Furnish basic design information on all new additions. Are existing backwash ponds and sludge ponds adequate to handle increased loading? Furnish design information listed below:
 - Discuss the various wastes from the water treatment plant, their volume, proposed treatment and points of discharge.
 - A summary shall be submitted for the proposed project, but not limited to the following:
 - 1. basin capacities
 - 2. retention times
 - 3. unit loadings
 - 4. filter area and proposed rates
 - 5. backwash rate
 - 6. chlorine contact time
 - pipe hydraulics

/ <u>X</u> /	New	, we wa				
//	Renewal	•	Permit No	77-268R) .:	
<i></i> /	Modified	·				
<u></u>						
		Casper Water	Treatment Expan	nsion :		
	 .		of Facility)	13 1011		
	This	permit hereby autho	rizes the appli	cant:		
		-	· ·			V
	* 1	City of Casper				
		(Last) C/O Black & Ve			(Middle))
		12075 East 45t	ch Ave., Suite 33	33		
		,,-	(Street or P.	0. Box)	-	
		Denver		Cole	orado 8	30239
		(City)	(County)	(S1	tate)	
to con	struct. inst	call, or modify a	Water Treatmer	nt Plant		
			Casnon			
Iacili	ty located 1	n the City of	(Legal Descript	ion)		
in the	County of _	Natrona		_, in the	e State	of
Wyomin	g. This per	mit shall be effect	ive for a perio	d of	2	years
from t	he date of i	ssuance of this per	mit not to exce	ed five	(5) year	s.
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		÷	Authorized by	:		
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<u> </u>	Administ ater Quality	\ 1	Wyoming Dept.	Directo	 DI ronment:	al Onality
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September 15, 1977

Date of Issuance

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: White Mountain Properties Commercial Area, Rock Springs, WY

ARCHITECT OR ENGINEER: Bush & Gudgell, P.O. Box 1144, Rock Springs, WY 82901

WATER QUALITY DIVISION REFERENCE NUMBER: 77-269

REVIEWING ENGINEER: David W. Hill, Don Armstrong, P.E., William L. Garland, P.E.

DATE OF REVIEW: August 9, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS: 1) All plans and specificiations must be signed or sealed by and engineer registered in the State of Wyoming.

Sewer System

No comments at this time.

Water System

2) Water mains shall be laid at least 10 feet horizontally from any sewer or storm sewer. The storm sewers must be constructed of special material (i.e. - encased in concrete or constructed of water main material) if this 10 foot minimum cannot be met.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: White Mountain Properties, Commercial Area, Rock Springs, WY

ARCHITECT OR ENGINEER: Johnny L. Probasca, P.E. - Bush and Gudgell, Inc.,

P.O. Box 1144, Rock Springs, WY 82901

WATER QUALITY DIVISION REFERENCE NUMBER: 77-269

REVIEWING ENGINEER: David W. Hill, Don Armstro

DATE OF REVIEW: August 25, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1) Water mains must be laid at least ten feet from storm sewers whenever possible. If this criteria cannot be met the storm sewer must be encased or constructed of water line material. Please indicate horizontal distance between the water lines and storm sewer lines on Sheet 2 of 14. This sheet does not seem to agree with the detailed water-sewer line crossovers on sheet 13 of 14.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: White Mountain Properties Commercial Area, Rock Springs, WY

ARCHITECT OR ENGINEER: Johnny Probasco, P.E. - Bush & Gudgell, P.O. Box 1144, Rock Springs, WY 82901

WATER QUALITY DIVISION REFERENCE NUMBER: 77-269RR

REVIEWING ENGINEER: David W. Hill, Don Armstylong, P.E., William L. Gerland, P.E.

DATE OF REVIEW: October 5, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

All water mains must be laid at least ten feet horizontally from any sewer line (including storm sewers). If this horizontal separation is not possible, the sewer line must be constructed of special materials (i.e. - encased in concrete or constructed of water line type material within this 10 foot distance). Please supply an addendum covering this.

PERMIT TO CONSTRUCT

/ <u>X</u> /	New		
//	Renewal	Permit No. 77-	269RRR
//	Modified		
	White Mountain Proper		
	(Name of	Facility)	
	This permit hereby author	izes the applicant	:
	Prudential Service	Corporation	
	(Last)	(First)	(Middle)
	115 South Main		
		(Street or P.O. B	ox)
	Salt Lake City		Utah 84100
	(City)	(County)	(State)
to con	struct, install, or modify a _Wa	ter Lines, Sewer L	ines, and Storm Sewer
facili	ty located in Section 33, T19N,	R105W	
** OCTT	(Legal Description)	
in the	County of Sweetwater	, i	n the State of
Wyomin	g. This permit shall be effecti	ve for a period of	2years
from t	he date of issuance of this perm	it not to exceed f	ive (5) years.
		Authorized by:	
La 0.0	0° 2° 0° 0° 0°	Robert	E. Sundin
<u> ۲۰۰۰ مید</u>	Administrator	_	rector Environmental Quality
W	Vater Quality Division	whoming nebr. or	THAT TOUR CHEST AGGITTEN
	November 3, 1977	·	
	Date of Issuance		

cc: Bush and Gudgell, Inc., P.O. Box 1144, Rock Springs, WY 82901



Department of Environmental Quality Water Quality Division

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

March 11, 1982

Painter Estates c/o Mrs. Garnet Cary Upper Clark's Fork Cody, WY 82414

RE: Expansion of Painter Estates Mobile

Home Park

Dear Mrs. Cary:

As requested by your letter, received March 1, 1982, I reviewed the proposed wastewater collection and disposal system authorized under our permit No. 77-270RR for Painter Estates.

I can not find the proposed expansion area as outlined in your letter and discussed during my visit, in the approved engineering plans. Although we do not object to utilizing your existing disposal facility, this proposed sewer expansion will still require the services of a professional engineer to submit the necessary plans to this office for formal approval. Referencing the plans with DEQ #77-270RR as much as possible should help expedite the review process.

I have been unable to reach you by phone to further explain our requirements. However, if further information is required, please do not hesitate to contact us.

Respectfully,

. Robin Collins, P.E.

Northwest District Engineer

MRC:ch

cc: Tim Morrison, Park County Planner
 DEQ/WQD Cheyenne
 File (2)

PERMIT TO CONSTRUCT

/ <u>X</u> /	New			,
//	Renewal		Permit No. 7	7-270RR
//	Modified			
	<u>P</u> a		rnet Cary Mobile Ho	me Park)
			of Facility)	
	This	permit hereby aut	horizes the applica	int:
		Cary	Garnet	
		(Last)	(First)	(Middle)
		P. O. Box 255		
			(Street or P.O.	Box)
		Cody	Park	Wyoming 82414
		(City)	(County)	(State)
to cor	nstruct, ins	tall, or modify a	Waste Treatment a	nd Water Supply
facil	ity located	in Section 4, T5	6N, R106W	
		•	(Legal Description	on)
in the	e County of	Park		in the State of
Wyomin	ng. This pe	rmit shall be effe	ctive for a period	of 2 years
from 1	the date of	issuance of this p	ermit not to exceed	l five (5) years.
			Authorized by:	
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<u> </u>	Oleann d' Adminis	trator	1200000	Director
1	Adminis Water Qualit	X 1	Wyoming Dept.	of Environmental Quality
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	June 14, 19	78 of Issuance		
	Date	טו ווסטעמווכל		

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
Hathaway Office Building
Cheyenne, Wyoming 82002

PROJECT: Garnet Cary Mobile Home Park

Section 33, T57N, R106W, Park County

ARCHITECT OR ENGINEER: Graham and Associates, ATTN: Lee Graham, P.E.,

P. O. Box 348, Cody, Wyoming 82414

WATER QUALITY DIVISION REFERENCE NUMBER: 77-270R

REVIEWING ENGINEER: Roy E. Prior, David W. Hill, William L. Garland, P.E.

DATE OF REVIEW: February 23, 1978

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS: DUE TO THE NUMBER OF COMMENTS, THIS CANNOT BE CONSIDERED A FINAL REVIEW.

WASTEWATER SYSTEM

- 1). A manhole should be installed at the end of the outfall line as close to the lagoon as possible. This manhole should have an invert at least six (6) inches above the maximum operating level of the lagoon.
- 2). The termination of the influent line should be near the center of the primary cell, i.e. not next to the bank.
- 3). Wyes Branches should be used rather than saddles.

WATER SYSTEM

WATER LINES

- 4). On page 1, it is indicated that polyethylene pipe will be used, yet on page 2 it is indicated that PVC pipe will be used. Which will be used?
- 5). Please indicate where all valves in the main line are.

WATER STORAGE TANK

- 6). A vent is needed. It shall project at least two (2) feet above the ground and end in a downward turning elbow with a screened end. Provide details.
- 7). Provide details of the termination of the overflow pipe.
- 8). The overflow pipe should be larger.
- 9). A drain is needed. Provide details.

PROJECT: Garnet Cary Mobile Home Park

WATER QUALITY REFERENCE NUMBER: 77-270R (CONT)

- 10). Please provide disinfection specifications for the water storage tank.
- 11). Can the entrance be locked?
- 12). What are the gaskets made out of? Are they FDA, NSF or EPA approved.
- 13). How is the water level in the tank controled?

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Garnet Cary Mobile Home Park, Section 33, T57N, RT06W

ARCHITECT OR ENGINEER: Lee Graham, P.E. - P.O. Box 348, Cody, WY 82414

WATER QUALITY DIVISION REFERENCE NUMBER:

17.3270 William S. Garland

REVIEWING ENGINEER:

Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: August 26, 1977

ACTION: GONSTRUCTION IS NOT AUTHORIZED

COMMENTS:

- 1. For 30 units the well would have to furnish over 65 gpm peak demand. The well is adequate at 11 gpm to meet daily supply demands but will not furnish peak demands. Therefore a storage tank is required. Send specifications. Furnish design information on water system to ensure a minimum of 20 psi under all conditions of flow.
- 2. An underground drain cannot be utilized on the water riser. Recommend a $\frac{1}{4}$ " air line with a valve being installed to blow water out of line when the line is not in use.
- 3. Manholes are required to have a 42 inch diameter minimum. A manhole is required on the West collection line where the cleanout is shown. A cleanout can be used on the East line provided the distance from the manhole does not exceed 150 ft. Send details and specifications for cleanout.
- 4. The water distribution systems have to be a complete loop or provide flushing hydrants at the ends of deadends (send specifications and details).
- 5. Pond shall be fenced and warning signs posted.
- 6. Send design information to ensure ponds are full retention (i.e. evaporation and percolation rates, flows, etc.)

PERMIT TO CONSTRUCT

			•	•	
/ <u>x</u> /	New		·	•	
//	Renewal		Permit No	77-271RRR	·
//	Modified	•			
		Sweetwater l	Jranium Project		,
	•	(Name	of Facility)		
	This	permit hereby auti	horizes the appli	cant:	
				•	
		Minerals Explo	oration Company	•	
٠		(Last)	(First)	(Middle)	
		P. O. Box 5494			<u> </u>
			(Street or P.	0. Box)	
		Los Angeles		CA 90054	
	1.4	(City)	(County)	(State)	
	ity located :	call, or modify a _ inSection 14, 15	, 21, T24N, R93W		· · · · · · · · · · · · · · · · · · ·
			(Legal Descript	10n)	
in the	County of _	Sweetwater		_, in the State o	f
Wyomin	ng. This per	rmit shall be effec	ctive for a perio	d of 2	_years
from t	he date of	issuance of this pe	ermit not to exce	ed five (5) years	
			•		
			·		
	•		Authorized by	:	
(1).0	Oia . J.	Jala D	Hobert	E, Sundin	
W	Administ Vater Quality	· · · · · · · · · · · · · · · · · · ·	Wyoming Dept.	Director of Environmental	Quality
	· •	•			
I	May 12, 1978				
	Da+-	of Toologo			

cc: Dames & Moore, George C. Toland, P.E., 250 East Broadway, Suite 200, Salt Lake City, Utah 84111 Minerals Exploration Company, P. O. Box 1500, Rawlins, Wyoming 82301

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Minerals Exploration Company, Sweetwater Uranium Project

ARCHITECT OR ENGINEER: George C. Toland, P.E. - Dames & Moore

Minerals Exploration Company, P.O. Box 7600, Los Angeles, CA 9000

Attention: Richard Salisbury

WATER QUALITY DIVISION REFERENCE NUMBER: 77-27

REVIEWING ENGINEER: David W. Hill, Don Artstrong, P.E., William L. Garland, P.E.

DATE OF REVIEW: September 14, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

BARIUM CHLORIDE TREATMENT

- 1) We need details of the barium chloride-flocculant feed equipment and mix tanks.
- 2) Details are needed of the effluent flow measuring equipment. Continuous flow monitoring must be utilized.

TAILINGS RETENTION BASIN

- 3) On page 11 of the design report, you state that the tailings pond is adequate for 11 years production of tailings and water. Yet the mill is to exist for 15 years. Please clear this up for us.
- 4) Please indicate the sources where the area evaporation-precipitation data was obtained.
- 5) We are concerned about the seepage from the tailings pond. However, we have no one in Water Quality who is an expert in groundwater hydrology. This Division will be satisfied when Land Quality Division reviews the information and has determined the rate to be satisfactory.
- 6) This Division would like to receive the results of the quaterly monitoring of the monitoring wells.
- 7) All storm water runoff from disturbed areas (mill area, mining area, waste storage area, ore stock pile, leach pad, etc.) must be controlled as required by your discharge permit. Please address.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Minerals Exploration Company - Sweetwater Uranium Project

ARCHITECT OR ENGINEER: George C. Toland, P.E. - Dames & Moore

Mineral Exploration Co., P. O. Box 7600, Los Angeles, CA 90000

WATER QUALITY DIVISION REFERENCE NUMBER: 77-2718

REVIEWING ENGINEER: Roy E. Prior, P.E.

DATE OF REVIEW: December 28, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

TAILINGS RETENTION BASIN

- 1). Due to the size of material allowed in zone 3, there should be a sand bedding under the PVC liner.
- 2). Please provide details of construction, design and operation of the discharge structures. Will the sand slide off of the sides and expose the liner? Will the sand be eroded by the discharge pipes?
- 3). The monitoring wells should have a minimum of four (4) inch casing to allow for pump installation.
- 4). The annular space above the water table should be sealed to the surface with an impervious material such as neat cement grout or concrete grout.
- 5). The basins should have an underdrain system to detect leaks in the liner.
- 6). We are requesting that a copy of the monitoring data be sent to the Water Quality Division.

cc: Minerals Exploration Company Sweetwater Uranium Project P. O. Box 1500 Rawlins, Wyoming 82301

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
Hathaway Office Building
Cheyenne, Wyoming 82002

PROJECT: Minerals Exploration Company - Sweetwater Uranium Project

Sweetwater County

ARCHITECT OR ENGINEER: George C. Toland, P.E., Dames & Moore

c/o Minerals Exploration, P. O. Box 7600, Los Angeles, CA

90000

WATER QUALITY DIVISION REFERENCE NUMBER: 77-271RR

REVIEWING ENGINEER: Roy E. Prior - William L. Garland, P.E.

DATE OF REVIEW: March 15, 1978

William S. Garland

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1). From your visit of March 7, 1978 and delivery of a letter dated February 27, 1978 from Dames & Moore to Minerals Exploration Company, we understand the underdrain system for the tailings retention basin is being redesigned for re-submital to Water Quality Division.
- 2). All plans and specifications must be signed by an engineer registered in the State of Wyoming.
- cc: L. G. Dykers, General Manager Minerals Exploration Company Sweetwater Uranium Project P. O. Box 1500 Rawlins, Wyoming 82301

PERMIT TO CONSTRUCT

/ <u>X</u> /	New			
//	Renewal		Permit No. 77	-272RR
//	Modified			
				•
		Y=0 Tracts Water (Name	System of Facility)	
	This	permit hereby auth	norizes the applica	ant:
		Jirdon Industr (Last)	ries, Inc. (First)	(Middle)
		ATTN: Mr. Don		
		ATTN: PIT. DOT	(Street or P.O.	. Box)
		Morrill (City)	(County)	Nebraska 69358 (State)
	•			
to con	nstruct, ins	stall, or modify a	Public Water Supp	ly & Distribution 🧚
facil:	ity located	in Section 29 & 30), T24N, R67W (Legal Description	on)
in the	e County of	Platte	·	, in the State of
Wyomin	ng. This pe	ermit shall be effe	ctive for a period	of <u>2</u> years
from	the date of	issuance of this p	ermit not to exceed	d five (5) years.
			•	
٠				
			Authorized by:	
(29.	Qia d	Jala 2	Hebers (E. Lindin
	Adminis Water Qualit	strator ty Division	Wyoming Dept.	Director of Environmental Quality
	January	12. 1978		
		e of Issuance		

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Y-O Tracts, Proposed Water Line

ARCHITECT OR ENGINEER: K & H Engineering, P.O. Box 856, Wheatland, WY 82201

WATER QUALITY DIVISION REFERENCE NUMBER: 77-272

REVIEWING ENGINEER: Tom Mueller, William L. Garland, P.E.

DATE OF REVIEW: August 10, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION, SEE COMMENTS.

COMMENTS:

- 1. Insufficient information is given on the cross-connection to the Town of Wheatland. Please indicate exactly where the connection is located and what type of protection will be used to prevent backflow into the Town's system. Also, please supply a letter from the Town agreeing to the connection and to the use of water by the homes which will be served routinely by the 4-inch line.
- Inadequate information is given on the supply system to which this distribution line will be connected. Please supply the following information:
 - a) What are the anticipated yield of the well, and the condition of the well pump?
 - b) What are the condition and capacity of the cistern?
 Is the cistern large enough to supply water at fire
 flow for 2 hours? If not, fire hydrants should not be
 connected to the system. Is the cistern equipped with an
 overflow, drain, and locked access?
 - c) What is the condition and capacity of the cistern pump?
 Will it provide 20 psig to all portions of the system
 under all conditions of flow? Will it provide minimum
 fire flows? If not, fire hydrants shall not be connected
 to the system. What arrangements will be made for backup
 service in case of pump failure?

In light of the fact that this is a new public water supply being connected to a previously operating source and storage facility, an inspection may be required before the system is placed into operation.

- 3. The pipe bedding specification is inadequate. The pipe shall be supported by undistumbed earth for at least one quarter of its perimeter (i.e., class D bedding is unacceptable.) What compaction is anticipated for backfill and over-excavated bedding?
- 4. The hydro static test pressure shall be specified.
- 5. Thrust blocks shall be provided at all bends, tees and dead ends. These should be indicated on the plans. Valve pads are recommended.
- 6. Please indicate bury depth of pipe (i.e. to prevent freezing.)
- 7. The associated plans for the Y-O Tracts sewer system show that the sewers will also be located in the streets. Please indicate that a 10 foot separation will be maintained and provide a crossing specification.

NOTE: The AWWA Standards called out have all been revised since the dates noted. The best method of calling out such Standards is to refer to them "in the latest revision" rather than to a dated edition. It would also be helpful if the pipe specification were related directly to AWWA C-900.



Department of Environmental Quality Water Quality Division

HATHAWAY BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

December 9, 1977

CERTIFIED

Mr. Don Steen Jirdon Industries, Inc. Morrill, Nebraska 69358

SUBJECT: Y-O Tracts Water System (Ref. No. 77-272R)

Dear Mr. Steen:

This is in response to our phone conversation of October 25, 1977, and to a plan I received on November 29 from Mr. Gary Kephart. During our phone conversation, I requested that you, Mr. Kephart, Mr. Ken Kennedy and the project contractor meet and submit information to reconcile inconsistencies between the previous information I have received and the actual construction I witnessed at the Y-O Tracts on October 17, 1977. Apparently the plan from Mr. Kephart was an attempt to satisfy this request.

Please take note of the following:

- The plan I received from Mr. Kephart was not prepared by a Professional Engineer and as such cannot be accepted by this office for review or permit purposes. I have therefore returned it to him.
- 2) I have not received the other information I requested, namely, a) the actual specifications for the water system pumps, including head vs. flow charts, and b) drawings of the new pumphouse plumbing and layout.
- 3) The water line construction at Y-O Tracts is in violation of the law, due to the fact that it took place prior to issuance of a permit. No action has been taken on the violation due to the good construction and the apparent cooperativeness of the owners. However, if no satisfactory reply has been received within 30 days of receipt of this letter, this matter will be referred to the Attorney General's Office for appropriate legal proceedings. Any further construction will also be referred to the Attorney General.

Mr. Don Steen Jirdon Industries, Inc. December 9, 1977 Page 2

If you have any questions, please contact me immediately.

Yours truly,

Tom Mueller

Environmental Engineer Water Quality Division

TM/jo

cc: Gary Kephart, P.O. Box 814, Wheatland, WY 82201 Ken Kennedy, P.O. Box 856, Wheatland, WY 82201 Harold Anderson, Platte County Sanitarian, Goshen County Courthouse,

Torrington, WY 82240 Platte County File

Muller

PERMIT TO CONSTRUCT

/ <u>X</u> /	New			,
//	Renewal		Permit No7	7-273
//	Modified			
		C: 7 C		
	·	Girl Scouts of Ame (Name	of Facility)	
	Thic	permit hereby auth	orizes the applic	ant:
	Inis	permit hereby duen	torized the apprica	
		Girl Scouts of (Last)	America (First)	(Middle)
		c/o John W. Dor P.O. Box 13	nnell and Associat	ces
		-	(Street or P.O). Box)
		Worland		Wyoming 82401
		(City)	(County)	(State)
			en e	
to con	nstruct, ins	tall, or modify a $_$	Water System	<i>:</i>
facili	ty located :	in East of Tensle		
			(Legal Descripti	on)
in the	County of	Washakie		, in the State of
Wyomin	ng. This per	rmit shall be effec	tive for a period	of 2 years
		issuance of this pe		
		•		
			Authorized by:	
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т.	Adminis Vater Qualit		Uyoming Dent	Director of Environmental Quality
V	water Qualit	y DIWESTON	whoming nehr.	of Phytronimental daarrel
		er 14, 1977	 	
	Na+⊳	of Issuance		

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Girl Scouts of America Water System, Tolman #1, Washakie Co.

ARCHITECT OR ENGINEER: LaVerne Nelson, P.E.

WATER QUALITY DIVISION REFERENCE NUMBER: 77-273

REVIEWING ENGINEER: Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: 8-29-77

ACTION: CONSTRUCTION AUTHORIZED (SEE COMMENTS)

COMMENTS:

- 1. Ensure adequate cap on end of 8" infiltration to facilitate back flushing.
- 2. Seal wet well with bituminous coatings on outside and bituminous sealant between joints.
- 3. Access manhole of storage tank shall be an extension (sealed watertight) from access hole to surface. Access hole should be 24 inches minimum.
- 4. Specify corrosion protection on outside of steal storage tank. Ensure bedding specifications to protect corrosion coating.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: KOA Campground - Gillette, WY

ARCHITECT OR ENGINEER: W. K. Duffey, Building Systems, Inc.

21 N. Meramec, Clayton, MO 63105

WATER QUALITY DIVISION REFERENCE NUMBER: 274RRRR

REVIEWING ENGINEER: Dan H. Kim, Jake Strohman, P.E.

DATE OF REVIEW: 9/12/78

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1. The leach field is still too small. With a 20 min/in percolation rate and a 14,700 GPD flow, total leach field area required is 13,148 square feet. (each leach field size = 6,574 ft²) With the trench width of 2 feet. Total length of leach field lines needed for each leach field is 3,300 ft. (your proposed leach field has only 1,900 ft of leach field lines).
- 2. Note that minimum distance <u>between trenches</u> is 6 feet (not between the pipes) in the leach field.
- 3. What is the average ground slope of the second leach field? Unless the area is leveled off up to 2% slope, 100 feet long leach field lines cannot be laid.
- 4. The wet well for the lift station shall have a minimum slope of 1 to 1 to the hopper bottom.
- 5. Which is the correct lift station pump description, QD470-11 or QD480-11? Please clarify. It should also be noted that neither type of pump is capable of passing spheres of at least 3 inches in diameter. (See Ten States Standards)
- 6. The gravity sewer pipe specifications are not consistent. Sheet 8 called for ASTM D3033 or D3034, whereas Sheet 11 called for AWWA C900. Please clarify.
- 7. Please provide 2" drop pipe material and specifications.
- 8. Chlorination of groundwater with a minimum of 30 minutes detention time before reaching consumers is required. The proposed chlorine room does not meet the requirements of Section 5.4.1 of the Ten State Standards. Chlorine gas feed and storage shall be enclosed and separated from other operating areas. The chlorine room shall also be provided with adequate ventilation, light, safety equipment, scale etc.

Review of Reference Number 77-274RRRR Page 2

- * If chlorine compound (i.e. calcium hypochlorite, sodium hypochlorite, etc) is to be used, isolate feed room may not be required. However, separate tanks for mixing and feeding the calcium hypochlorite are needed. Provide details.
- 9. The proper plastic pipe installation specifications are UNI-Bell, UNI- $\pm 8-3-77$ or AWWA C603 for water pipe & ASTM D-2321 for sewer pipe. Please insert this in the specifications.
- 10. Specifications on water/sewer crossings do not meet the Chapter III of Wyoming Water Quality Rules & Regulations. When 18" vertical separation between the bottom of water line and the tope of the sewer cannot be obtained, the sewer line shall be constructed of materials and joints that are equivalent to water main standards of construction and shall be pressure tested for water tightness. (See Sheet 8)
- 11. Due to the number of comments, this, cannot be considered a final review.

y)

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
Hathaway Office Building
Cheyenne, Wyoming 82002

PROJECT: KOA Campground - Gillette Wyoming - Campbell County

ARCHITECT OR ENGINEER: W. K. Duffey, Building Systems, Inc., 21 N. Meramec, Clayton, MO 63105

WATER QUALITY DIVISION REFERENCE NUMBER: 77-274RRR

REVIEWING ENGINEER: Roy E. Prior - William L. Garland, P.E.

DATE OF REVIEW: May 25, 1978

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1). The dosing tank cannot be used as a septic tank.
- 2). The primary septic tank is too small.
- 3). The leach field is too small. With a 20 min/inch percolation rate and a 14,700 GPD flow, a minimum of 6562.5 square feet of leach field is needed.
- 4). Is the ground in the area of the leach field flat? Provide contour details.
- 5). The valves for the lift station must be located outside the wet well.
- 6). Provide manufacturers details of pumps and lift station. This should include pump curves, detail drawings, etc.
- 7). Show inlet details for the lift station.
- 8). The lift station should be protected against flooding, provide details.
- 9). Is there protection against clogging?
- 10). Is emergency power provided?
- 11). The entrance to the dosing tank should be protected against flooding
- 12). Is there a vent on the lift station?
- 13). The dosing tank shows valves in the wet well and outside the wet well, please clarify.

PROJECT: KOA Campground - City of Gillette

COMMENTS (CONT)

- 14). Provide manufacturer's details of frost proof hydrant. An anti-pollution type must be used. A stop and waste type is not allowed.
- 15). You have indicated specifications that are normally associated with PVC water pipe for sewer pipe. Can service taps be made to the water type pipe? What will the pressure be in the force main?
- 16). The drain on the pressure tank house should go to a dry sump.
- 17). Provide details of well vent, well seal, specifications on drop pipe, well casing, surface grouting, etc.
- 18). What is the pressure rating of the storage tank?
- 19). The ability to chlorinate the water should be provided.
- 20). Provide installation specifications for water and sewer lines.
- 21). Provide specifications on water/sewer line crossings, i.e. see Chapter III, Section 15, Water Quality Division Rules and Regulations.
- 22). Provide specifications on horizontal separation of water and sewer lines.
- 23). Provide specifications to prevent excessive sidefill pressure and ovalation of sewer pipes.
- 24). Provide specifications for infiltration and exfiltration of the sewer lines.
- 25). Provide specifications for leakage test of water lines.
- 26). The AWWA C-900 standard applies to 4 inch through 12 inch PVC pipe, please provide specifications for the 2 inch pipe.
- 27). Due to the number of comments, this cannot be considered a final review.
- cc: Mr. Jim Busby, P. O. Box 41, Gillette, Wyoming 82716



Department of Environmental Quality Water Quality Division

HATHAWAY BUILDING

January 25, 1978

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

A. Glenn Aaron President Buildings Systems, Inc. 21 North Meramec Clayton, Missouri 63105

REF: 77-274RR

Dear Mr. Aaron:

This letter is to confirm our telephone conversation of January 24, 1978. This office will not continue the review of the above referenced plans until additional information is received.

Sincerely,

Roy E. Prior

Environmental Engineer Water Quality Division

REP/do

CC

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

KOA Campground - Gillette, WY PROJECT:

ARCHITECT OR ENGINEER: W. K. Duffey, Buildings Systems, Inc., 21 N. Meramec.

Clayton, MO 63105

REVIEWING ENGINEER: Roy E. Prior, William L. Garland, P.E.

DATE OF REVIEW: 11-8-77

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

Sewer system

- 1. Leach field and septic tank are too small.
- Sewer sites should be 350 gal/day/each site.
- 3. Amount of sewage from dump stations is not provided.
- Amount of sewage from laundry is not provided. 4.
- 5. Non-sewer sites (upc) = 150 gal/site.
- Dosing tank cannot be considered part of the septic tank.
- 7. There should be six (6) feet between leach field trenches.
- 8. There should be untreated building paper between earth.
- 9. Cover and gravel in leach field.
- Specifications indicate 2 foot wide trench, detail shows 1.5 foot wide trench.
- 11. Does the fiberglass extend over the full length of the tile in the leach field?
- 12. Will the ends of the leach line be tied together?
- Gravel for the leach field should be 1½ inch minimum to 2½ 13. inch maximum.
- 14. What is the slope of the leach lines and leach field?

77-274R

- 15. The lift station at the end of the septic tank shall be constructed per Ten State Standards.
- 16. Is there reinforcing in the septic tank, dosing tank and lift station?
- 17. Provide details and hydraulics on swimming dry well.
- 18. Provide details on the lift station at point A.
- 19. Provide details on cleanouts.
- 20. Provide specifications on manhole covers, concrete pipe, type of grout and installation of the manhole.
- 21. The manholes are too small.
- 22. The water riser at the dump station should be protected against freezing.
- 23. Provide ground slope of leach field area.

B. Water System

- 1. Your estimated water requirement of 50 gpd per site is too small. The water demand should be greater than the sewage discharge.
- 2. The system should be designed for peak flows and fire flows if fire protection is provided.
- 3. What is your peak demand and maximum average daily demand?
- 4. The design should include lawn watering, laundry, washwater at the dump station, swimming pool and fire flows.
- 5. Where are the water valves located?
- 6. Show how the water system is connected to the supply system.
- 7. Provide manufacturers data on well pump, Sepes-Air Hydropresson: and sanitary well seal.
- 8. Provide detail drawings of well construction as per 10 State Standards and WOD Chapter III Regulations.
- 9. The permanent casing for well shall project at least 12 inches above the concrete apron surface and at least 18 inches above final ground surface.
- 10. Discharge piping from the well shall be equipped with the items required by 10 State Standards.

77-274R

- 11. Provide chemical and bacteriological analysis of the well.
- 12. What are the specifications for the pressure tank?
- 13. Pressure tank shall be completely housed to prevent freezing. The well house to be constructed should be shown on the plans.
- 14. The riser pipes should be protected against freezing.
- 15. The riser pipes shall be protected by a concrete apron or other approved method(s).
- 16. The waterlines are too small. They shall be two inches in diameter or larger. Fire protection will require a minimum of six inch lines.

C. General

- 1. Provide the following specifications:
 - a. Sewer pipe (both force main and gravity types).
 - b. All water pipes.
 - c. Installation and backfill for all type of pipes, manholes, valves, etc.
 - Water and sewerline crossings (ref. Chapter III Regulations, section 15).
 - e. Horizontal separation of water and sewer lines.
 - f. Excessive side pressures and ovalation of the sewer pipes.
 - q. Infiltration and exfiltration.
 - h. Leakage test for the water system.
 - i. Valves.
- Complete and return the enclosed application for a permit to construct.
- D. Due to the number of comments this cannot be considered a final review.

cc: Mr. Jim Busby, P.O. Box 41, Gillette, WY 82716 Campbell County Planning Office

Enclosure

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: KOA Campground - Gillette, WY

ARCHITECT OR ENGINEER: W. K. Duffey, Building Systems, Inc., 21 N. Meramec,

Clayton, MO 63105

WATER QUALITY DIVISION REFERENCE NUMBER: 77-274

REVIEWING ENGINEER: Dan H. Kim, Roy E. Prior, William L. Garland, P.E.

DATE OF REVIEW: September 7, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION.

COMMENTS:

- 1. Need to submit an application for a Permit to Construct.
- You've submitted two different design data for sewage systems. Please clarify (one data shows total sewage flow of 5050 gpd and the other one indicates 5800 gpd).
- 3. Specifications on material, installation and testing of water and sewer pipe, shall be provided. Campbell County Codes are not approved by Wyoming Department of Environmental Quality. They shall meet 10 State Standards and our Chapter III Regulations.

SEWER SYSTEM

- 4. Details of lift station are required.
- 5. Where will the swimming pool water be discharged into?
- 6. Maximum distance between manholes for 6 inch line is 400 feet.
- 7. Manhole shall be installed at the ends of each line or cleanout if less than 150 feet.
- 8. The riser pipe shall terminate a minimum of 4 inches above natural ground, standing water or surface water runoff, whichever elevation is higher.
- 9. How is sewer riser connected to sewer line? i.e. Wye branch required.
- 10. Provide detail drawing of sewer riser located between manholes. They shall connect to the collection main at a maximum 45° bend in the direction of sewage flow. What kind of material is used for capping the riser?

- 11. Provide horizontal and vertical separation between water eriser and sewer riser.
- 12. The water riser pipe should be protected by concrete apron or other approved method(s).
- 13. Sanitary Dump Station show complete details. The following details should be submitted;
 - A. The minimum horizontal separating between water riser with hose bibbs and dump hole is 5 feet.
 - B. Show slope to drain on concrete slab.
 - C. Show wheel bumper wood.
 - D. Water riser shall be protected by concrete sleeve at ground surface.
 - E. Sign posts instructing how to use and warning unsafe water should be installed.
 - F. Backflow preventer or other cross connection control device shall be provided to water tower.
 - G. Stop and waste valve is not allowed for riser with hose bibbs either.
- 14. Septic tank and Leach field.
 - A. Please provide capacity of dosing pump based on 5800 gpd flow.
 - B. Provide dimensions of access manhole, backfilling specifications. Type and size of inlet and outlet pipe of septic tank, slope of final ten feet of sewer line preceding a septic tank, etc.
 - C. The capacity of septic tank is a little undersized for 5800 gpd flow. Dosing tank capacity should not be included in septic tank capacity.
 - D. Provide maximum size of gravel or crushed stone in leach trench.
 - E. Provide ground slope of proposed leach field site.
 - F. What is the known approximate groundwater level or impervious layer under the leach field?
 - G. Provide the distance between trenches.

- H. What is the type of distribution pipe in leach field?
- I. Two pumps in the dosing tank are recommended.
- J. Provide details on how system will alternate and change over piping.

15. Water System

- A. Your estimated water requirement of 50 gpd per site is quite undersized. In addition, well capacity shall equal or exceed the design maximum day demand. What is your peak demand? What about lawn watering and fire fighting requirements?
- B. Please show water valves. Does the sytem need air relief valves? Why is the <u>entire</u> water system not looped? Need correction or justifications.
- C. Provide manufacturer's data of well pump and "Sepes-Air Hydro pressor."
- D. Provide detail drawings of well construction as per 10 State Standards and State's Chapter III Regulations.
- E. Permanent casing for well shall project at least 12 inches above concrete apron surface and at least 18 inches above final ground surface.
- F. Discharge piping from well shall be equipped with provisions as per 10 State Standards.
- G. Is the size of drop pipe 5-inches or 3-inches?
- H. Chemical and biological analysis of well shall be provided.
- I. Does pressure tank meet ASME code requirements or an equivalent AWWA Standards for unfired pressure vessels?
- J. Pressure tank shall have an access manhole with 24 inches in diameter.
- K. Pressure tank should be completely housed to prevent freezing. Well house to be constructed should be shown in plans.
- 16. Due to the number of comments this cannot be considered a final review.
- cc: Campbell Co. Planning
 Mr. Jim Busby, P.O. Box 41, Gillette, WY 82716

PERMIT TO CONSTRUCT

			· ·	
//	New	\$		
//	Renewal		Permit No. 7	77–275RRR
/ <u>x</u> /	Modified			
			n 1 TT	
		Hoy Mobile H	ome Park II of Facility)	
		·	• •	
	This	permit hereby aut	thorizes the applica	nt:
			•	•
		Ноу	Philip	
		(Last)	(First)	(Middle)
		Box 1656	o especia	
			(Street or P.O.	Box)
		Gillette	Campbell Campbell	Wyoming 82716
		(City)	(County)	(State)
facili	ity located i	n Section 4, T5	ON, R72W (Legal Description	n)
in the	County of _	Campbell	· -	in the State of
			-	
Wyomin	ng. This per	mit shall be effe	ective for a period o	of <u>2</u> years
from t	he date of i	ssuance of this p	ermit not to exceed	five (5) years.
			Authorized by:	
(ب)	Dian &	Que Q	Robers	Elendin
	Adminis Water Quality	, \		Director f Environmental Quality
1	water Qualit	y DIMPSION	whoming pehr. o.	r Purtiquentar dagiti
		23, 1978		
	Date	of Issuance	•	

cc: M. Crawford, County Sanitarian
Plains Engineering, P. O. Box 2020, Gillette, WY 82716

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Hoy Mobile Home Park II, Water and Sewer Design

Campbell County

ARCHITECT OR ENGINEER: Plains Engineering

P. O. Box 2020 - Gillette, Wyoming 82716

WATER QUALITY DIVISION REFERENCE NUMBER:

REVIEWING ENGINEER: Roy E. Prior, P.E.

DATE OF REVIEW: January 12, 1978

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

The facility will not be authorized until the pump house modifications are approved.

Enclosure:

cc: Phillip Hoy
P. O. Box 1656

Gillette, Wyoming 82716

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Hoy Mobile Home Park II

ARCHITECT OR ENGINEER: Plains Engineering, P.O. Box 2020, Gillette, WY 82716

WATER QUALITY DIVISION REFERENCE NUMBER: 77-275

William S. Garland

REVIEWING ENGINEER: Roy E. Prior, William L. Garland, P.E.

DATE OF REVIEW: August 29, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

The plans and specifications do not conform to the requirements outlined in Appendix A, Chapter III Regulations, Water Quality Division. Some of the requirements are as follows:

- 1. Water lines are too small.
- 2. The profiles of all sewer lines are not shown.
- 3. Provide a typical manhole detail.
- 4. Sewer risers are not per our regulations.
- 5. Deadend lines must have a blowoff or fire hydrant.
- 6. Provide a typical lot detail.
- 7. Fire hydrants should be an AWWA type.
- 8. Disinfection specifications are outdated.
- 9. Gate valve:specifications are outdated.
- 10. Provide blocking details for valves.
- 11. What class of pipe is being used?
- 12. What % compaction is used for backfill and bedding?
- 13. Provide infiltration and exfiltration specifications.
- 14. Provide ovalation and side pressure specifications.

- 15. The calculations and plans submitted for the leach field are unclear. Preliminary calculations indicate the leach field is too small and will not meet our regulations.
- 16. The water supply system is not adequate. The peak flows are too small and fire flows were not considered.
- 17. What is municipal service class 160, plastic pipe?
- 18. One of the slopes in sewer line B does not agree with elevations given.
- 19. This cannot be considered a final review.

REP/jo

cc: Campbell County Planning Office, P.O. Box 540, Gillette, WY 82716

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Hoy Mobilie Home Park (1)

ARCHITECT OR ENGINEER: Plains Engineering, P.O. Box 2020, Gillette, WY 82716

WATER QUALITY DIVISION REFERENCE NUMBER: 377-2758

REVIEWING ENGINEER: Roy E. Prior, William L. Garland, P.E.

DATE OF REVIEW: 11-8-77

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. The line from the storage tank is too small.

2. The letter dated October 14, 1977, indicated two booster pumps but only one is shown. Are the pressure tanks still in the system. The drawings of the piping in the pumphouse are not clear, please clarify. The valves should be the same size as the pipes they are on.

3. Disinfection specifications do not conform to AWWA C601.

REP/jo

cc: Phillip Hoy, P.O. Box 1656, Gillette, WY 82716

/ <u>X</u> /	New	grand State of	• •	
//	Renewal		Permit No	77-276
//	Modified			
		01ympus Hill	s Subdivision	
		(Name	of Facility)	
	This	permit hereby auth	norizes the applic	cant:
		Trembath	Fred	
		(Last)	(First)	(Middle)
		845 Absorka		
			(Street or P.0). Box)
		Sheridan	Sheridan	<u> </u>
		(City)	(County)	(State)
		in Section 34, T56	5N, R84W (Legal Descripti	ion)
in the	County of _	Sheridan		_, in the State of
Wyomin	g. This per	mit shall be effec	tive for a period	d of2years
from tl	he date of i	Issuance of this pe	ermit not to excee	ed five (5) years.
			Authorized by:	
				·
[202]	Dian & C	Inland	Lobers	6. Sundin
(1)(2) w:	Administ	1 1	Wyoming Dept.	Director of Environmental Quality
<u>\</u> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Administ ater Quality	1 1	Wyoming Dept.	Director of Environmental Quality
	ater Quality	1 1	Holern Wyoming Dept.	

/ <u>x</u> / / <u>_</u> /	New Renewal Modified	•	Permit No	77-277
	This	Westgate Park No. 2 (Name of permit hereby author	Facility)	
	1.	Barnard Realtors (Last) c/o Sigma Enginee P.O. Box 4060	(First) ering	(Middle)
			(Street or P.	O. Box)
		Casper	Natrona	Wyoming 82601
		.(City)	(County)	(State)
facili	ty located i	n Section 33,34,27	, T33N, R80W Legal Descript:	ion)
		•	4	d of2_years
	he date of i ENGINEER S	ssuance of this perm STATED IN A PHONE CALL INSTALLED ON THE 4" DE	it not to exce . ON 8-11-77 THA	
		·	Authorized by	:
<u>UOS</u>	Administ ater Quality	1 3	Wyoming Dept.	Director of Environmental Quality

August 12, 1977

Date of Issuance

This permit <u>does not</u> supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Divis Subdivision - Campbell County (Resubdivision of Sunburst

Sewer and Water District)

ARCHITECT OR ENGINEER: Plains Engineering, P.O. Box 2020, Gillette, WY 82716

WATER QUALITY DIVISION REFERENCE NUMBER: 77-278

REVIEWING ENGINEER: Dan H. Kim, Roy E. Prior, P.E., William L. Garland, P.E.

DATE OF REVIEW: August 22, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

We are aware that this project includes only the installation of a 500 foot-long sewer line but it is still required to provide the following information:

- 1. Submit a letter of verification from Sunburst Sewer and Water District.
- 2. Should provide exfiltration specifications. Infiltration and exfiltration tests should be for each section of pipe. i.e. manhole to manhole.
- Should provide alignment testing specifications and specifications concerning excessive sidefill pressures and ovalation of the pipe.
- 4. This cannot be considered a final review.

/ <u>X</u> /	New			
//	Renewal		Permit No	77 - 278R
//	Modified			
		Divis Subdivi		
		(Name	of Facility)	
	This	permit hereby aut	horizes the applica	ent:
		Divis	Tom	L
		(Last)	(First)	(Middle)
		Box 1848		
			(Street or P.O.	. Box)
		Gillette		Wyoming 82716
		(City)	(County)	(State)
•		·.		a a militar a company
to con	nstruct, inst	all, or modify a	Wastewater Co	
facili	ity located i	n Section 3, T49	9N, R72W	
		•	(Legal Description	on)
in the	County of _	Campbell	:	, in the State of
Wyomin	ng. This per	mit shall be effe	ctive for a period	of 2 years
from t	the date of i	ssuance of this p	ermit not to exceed	five (5) years.
			Authorized by:	
ر ا	Dian & C	Jaco Q	Lobers	E. Sundia
, t	Administ Water Quality		Wyoming Dept.	Director of Environmental Quality
	·	r 22, 1977		
cc: P	Date lains Engine	of Issuance ering, P.O. Box 20	020, Gillette, WY	82716

/ <u>X</u> /	New			
//	Renewal	2	Permit No	77-279
//	Modified			
			d and 4th Filing Facility)	<u> </u>
	This	permit hereby author	rizes the applica	ent:
		Century West,	Inc. (First)	
		c/o C.S.S.A.	(First)	(Middle)
		P.O. Box 943	(Street or P.O.	Box)
		Cheyenne (City)	Laramie (County)	Wyoming 82001 (State)
		(CILY)	(County)	(Beate)
		in Section 21, T14N	I, R66W	tion/Sewage Collection
		. (Legal Description	on)
in the	e County of	Laramie		in the State of
Wyomir	ng. This pe	rmit shall be effecti	ve for a period	of <u>2</u> years
from t	the date of	issuance of this perm	nit not to exceed	l five (5) years.
	•			
			Authorized by:	
1001	0000 8	Q.Q. 8		E. A. main
	Adminis	trator		Director
Ţ	Water Qualit		Wyoming Dept.	of Environmental Quality
	Augus	t 11, 1977		
	Date	of Issuance		

/ <u>x</u> /	New			-
//	Renewal	* *	Permit No	77-280
//	Modified	-		
		United Parcel	Service me of Facility)	
	This	permit hereby as	uthorizes the appli	cant:
	• •			
		United Par	rcel Service	
	,	(Last)	(First)	(Middle)
		7171 Mercy	Road, Room 432	
			(Street or P.	O. Box)
		Omaha		Nebraska 68106
		(City)	(County)	(State)
		11	Sewage Disposa	i] = :
to con	istruct, inst	all, or modify a	a Sewage Disposa	
facili	ty located i	n Section 32.	T34N, R79W (Legal Descript	ion)
			- · · · ·	~
in the	· County of _	Natrona		_, in the State of
Wyomin	g. This per	mit shall be ef:	fective for a perio	od of
from t	he date of i	ssuance of this	permit not to exce	ed five (5) years.
NOTE:	OUTLET OF	SEPTIC TANK SHOU	LD BE 3" LOWER THAN	I INIFT
				n Drive, Casper, WY 82601
			Authorized by	
(0)	00° P(200	A Jacob	Contraction
<u> </u>	Administ Vater Quality	()	- Wyoming Dept.	Director of Environmental Quality
	. Augus	t 8, 1977	•	

Date of Issuance
This permit <u>does not</u> supercede the requirements for obtaining a Septic Tank
Permit from Natrona County Health Department.

/ <u>X</u> /	New			
//	Renewal		Permit No. 7	7-281
//	Modified			•
			water Line Extension of Facility)	<u>n</u>
	This	permit hereby autho	orizes the applicant	::
		_City of Cheyen	· ne	
		(Last)	(First) Associates, Inc.	(Middle)
	•	1 :0: Box 330	(Street or P.O. E	Box)
	·	Laramie (City)	(County)	Wyoming 82070 (State)
		(==3,	(= ==== 5) ,	
to con	struct, ins	tall, or modify a	Wastewater Line E	xtension
facili	ty located	in Section 12, T	14N, R67W (Legal Description))
in the	County of	Laramie	, i	in the State of
Wyomin	ng. Thís pe	rmit shall be effect	tive for a period of	2years
from t	the date of	issuance of this per	rmit not to exceed f	Five (5) years.
			Authorized by:	
los.	000000	May Da D	Allande E	E. Lamina
W.	Adminis Vater Qualit	1 \		irector Environmental Quality
	Анан	st 12, 1977		
	Dato	of Toppone		



Department of Environmental Quality Water Quality Division

HATHAWAY BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

November 25, 1977

Mr. Joe W. Zowadas Z Route 2, Box 188 Sheridan, WY 82801

RE: Zowadas Custom Meat-Cutting Building 77-282

Dear Mr. Zowadas:

Your application for a permit to construct or modify a waste treatment facility for said location has been recently referred to me. I am extremely sorry for the delay in answering it.

We have reviewed your application but a permit cannot be issued to you at this time due to the following problem.

According to Wyoming Water Quality Rules and Regulations, Chapter III, Section 3, Subpart K, "Small Waste Facilities" means sewage systems, a disposal and treatment works for a single family house, or a single mobile home unit.

Therefore, state regulations require that the application for a permit to construct wastewater facilities for other than single family residence shall carry the seal or signature of the designing engineer, who is a registered engineer in the State of Wyoming. The application also includes 2 sets of all plans and specifications. We will process your application upon receipt of the aforementioned requirements.

If you have any further questions, please contact Mr. Tom Mueller in our office.

Sincerely,

Dan H. Kim Environmental Engineer Water Quality Division

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Town of Baggs, Water Storage Facilities, Baggs, WY

ARCHITECT OR ENGINEER: Ba

Barbara Scott, Consulting Engineer, 1709 Carey

Avenue, Cheyenne, WY

WATER QUALITY DIVISION REFERENCE NUMBER: 77-283

Frank P. Hamas

REVIEWING ENGINEER: Frank R. Harman, P.E., William L. Garland, P.E.

DATE OF REVIEW: August 11, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS: The water storage tank material shall meet with the requirements of the AWWA Standards. In thickness this means a $\frac{1}{4}$ " thickness.

The proposed tank is only of 12 gauge thickness.

/ <u>X</u> /	New			
//	Renewal		Permit No	77-283R
//	Modified			
•		Town of Baggs W	later Tank	
		(Name o	of Facility)	
	This	permit hereby author	orizes the applic	cant:
		Town of Baggs		
		(Last) c/o B. J. Scott 523 W. 27th	, P.E. (First)	(Middle)
	•		(Street or P.	0. Box)
		Cheyenne		Wyoming 82001
		(City)	(County)	(State)
	struct, inst	call, or modify a Section 5, T12		ank
	•		(Legal Descript:	ion)
in the	County of _	Carbon		_, in the State of
Wyomin	g. This per	rmit shall be effect	ive for a period	d of 2 years
from t	he date of i	issuance of this per	cmit not to exce	ed five (5) years.
NOTE:		T AUTHORIZES CONSTR THE TRANSMISSION LI		NK AND APPURTENANT PIPING .
			Authorized by	:
(o).0), a P(Dr. On D	Lobers	-E. Sundin
W	Administ Vater Quality		Wyoming Dept.	Director of Environmental Quality
	Sept	ember 23, 1977		
	Date	of Issuance		

/ <u>X</u> /	New			
//	Renewal	į	Permit No.	77-284
//	Modified			
			Sewage Disposal of Facility)	<u> </u>
	This	permit hereby autho	orizes the applica	ent:
		permit hereby duene	Tibdb the applies	
	* 2	•		
	•	Nolan	James	
		(Last)	(First)	(Middle)
		P.O. Box 271		
			(Street or P.O.	. Box)
		Mills	Natrona	Wyoming 82644
		(City)	(County)	(State)
to con	istruct, inst	call, or modify a	Sewage Disposa	•
		Soction 20	Γ34N. R79W	
raciii	ity located i	LII	(Legal Description	on)
in the	county of	Natrona	,	, in the State of
Wyomin	ng. This per	rmit shall be effect	ive for a period	of2years
from t	he date of	issuance of this per	mit not to exceed	five (5) years.
	Nix Anderson			, , , , , , , , , , , , , , , , , , ,
			s, Inc., 501 N. Su	n Drive, Casper, WY 8260
			Authorized by:	
(0)	0010	10 B	An Electrical	Edmande
ميكيد	Administ	† \		Director
W	Vater Quality	y Division	Wyoming Dept. o	of Environmental Quality
	n .	10 3077		
		ust 12, 1977 of Issuance		

This permit <u>does not</u> supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.



Department of Environmental Quality . Water Quality Division

HATHAWAY BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

August 12, 1977

77-285

Graham and Associates 1508 Stampede Avenue Cody, Wyoming 82414

Attention: Lee Graham

RE: Areation Equipment for Pahaska

Teepee

Dear Lee:

I have reviewed the above design information which you furnished and submit the following comments:

The areation equipment appears to be adequate for an areated lagoon with BOD loading as estimated in the original design. Most areated lagoons in Wyoming require detention times around 15 days in the areation cell due to temperature and elevation. For this reason, the detention time in the primary cell should be about 15 days.

An oxygen transfer rate of slightly less than 8% would theorectically meet the BOD demand of the wastewater with the existing equipment. The transfer efficiency should be checked out.

Pahaska Teepee should get the plans authorized shortly as the construction season is highly unpredictable in the fall.

Hope you are recuperating from your operation satisfactorily.

Yours truly,

Jake Strohman Environmental Engineer Water Quality Division

JS/jo Enclosure

/ <u>X</u> /	New			
//	Renewal		Permit No.	.77-285R-
//	Modified			
		Pahas <u>ika</u>	.Teepee W/W Improve	ements.
		(Name	e of Facility)	
	This p	ermit hereby aut	thorizes the applic	eant:
		Pahaska Compa	-	
	·	(Last) c/o Grahman am 1508 Stampede		(Middle)
	~		(Street or P.C). Box)
		Cody	Park	Wyoming 82414
		(City)	(County)	(State)
to con	struct, insta	ll, or modify a	Wastewater Impr	covéments 🐙
facili	ty located in	Cody, WY		
	-		(Legal Descripti	on)
in the	County of	Park		, in the State of
Wyomin	g. This perm	it shall be effe	ctive for a period	of 2 years
from tl	he date of is	suance of this p	ermit not to excee	d five (5) years.
				,
,			Authorized by:	
	n - DC		P	E Sundan
لايريل	Administra	altor		Director
Wa	ater Quality I	Division	Wyoming Dept.	of Environmental Quality
	Sentambar	· 14, 1977		
		f Issuance		,

/ <u>X</u> /	New	•	, .,	
//	Renewal		Permit No	77-286
<u></u>	Modified			
	,			
	,			
		Big Horn County		**************************************
		(Name	e of Facility)	
	This	permit hereby aut	thorizes the applic	cant:
		Donnell	John	N
		(Last)	(First)	W. (Middle)
		P.O. Box 13	(,	(,
		F,0, B0X 13	(Street or P.O). Box)
		Mosellend	(021000 01 110	
		Worland (City)	(County)	Wyoming 82401 (State)
		(OIC)	(Councy)	(Beate)
	istruct, inst ity located i	tall, or modify a in_ Big Horn Count	Sewage Disposal ty Fairgrounds	
	•		(Legal Descripti	lon)
in the	County of _	Big Horn		, in the State of
Wyomin	ng. This per	mit shall be effe	ective for a period	of 2 years
from t	the date of i	ssuance of this p	permit not to excee	ed five (5) years.
			Authorized by:	
	P		Deer	E Sunding
<u>(W),</u>	Administ	rator	<u> </u>	Director
W	Vater Quality		Wyoming Dept.	of Environmental Quality
				-
	Septen ————	nber 14, 1977		
	Data	of Toomanaa		4

/ <u>X</u> /	New		ų ve	
//	Renewal		Permit No	77-287
//	Modified			
		Cedar Ridge Sto	rage Tank	
		(Name	of Facility)	
	This p	ermit hereby auth	norizes the applic	eant:
		Eddie	McCormick	
		(Last) c/o Tudor Engi 450 S. Federal		(Middle)
			(Street or P.C). Box)
		Riverton		Wyoming 82501
<i>;</i> *		(City)	(County)	(State)
	•	ll, or modify a _ the Town of The	Storage Tank ermopolis	
			(Legal Descripti	ion)
in the	County of	Hot Springs		, in the State of
Wyoming	g. This perm	it shall be effec	tive for a period	l of <u>2</u> years
from th	ne date of is:	suance of this pe	ermit not to excee	ed five (5) years.
		•	Authorized by:	
<u>(1),0</u>	Dia J. D.	elo l	Dober	r E. Sundin
Wa	Administrater Quality		Wyoming Dept.	Director of Environmental Quality
	September	· 14, 1977		
	Doto o	f Tecuance		

//	New	t			
//	Renewal		Permit	No. 77	-287R
/ <u>X</u> /	Modified				
			Ridge		
		(Na	me of Facili	:y)	
	This	permit hereby a	uthorizes the	e applica	ant:
		McCormick	Eddie		
		(Last) c/o Tudor E 450 S. Fede		rst)	(Middle)
				t or P.O.	Box)
		Riverton			Wyoming 82501
		(City)	(Cou	nty)	(State)
		call, or modify		nk Found	ation
facili	ty located i	n_ Town of Ther	mopolis (Legal De	escription	on)
		Had Coastan	, (Begar b	_	
in the	County of _	Hot Springs		,	in the State of
Wyomin	g. This per	rmit shall be ef	fective for	a period	of 2 years
from t	he date of i	issuance of this	permit not	to exceed	l five (5) years.
	•				
			Author	ized by:	
(0).	oin P	Vala I	La) berr	E. Sundia
W	Administ Water Quality		Wyomin	g Dept. (Director of Environmental Quality
	0ctobe	r 26, 1977			•
	Data	of Taguanaa			

$/\overline{\underline{\chi}}$ New			
// Renewal		Permit No	77-288
// Modified			
,	City of Casper, Mir	acle Center PHD Are	a
		of Facility)	
This	permit hereby auth	norizes the applica	ant:
	City of Casper		
		(First) d-of Public Utiliti reet	(Middle)
		(Street or P.O.	. Box)
	Casper	Natrona	Wyoming 82601
	(City)	(County)	(State)
	tall, or modify a _ the City of	Water and Sewer Casper	Extensions
facility located	III	(Legal Description	on)
in the County of	Natrona		, in the State of
Wyoming. This pe	rmit shall be effec	ctive for a period	ofyears
from the date of	issuance of this pe	ermit not to exceed	d five (5) years.
,	•	Authorized by:	
Olean S.	Ja Qo Q trakor	Robert	E Sundin Director
Water Qualit		Wyoming Dept.	of Environmental Quality
	_		
	- -		

Date of Issuance
This permit <u>does not</u> supercede the requirements for obtaining a Septic Tank
Permit from Natrona County Health Department.

/ <u>X</u> /	New	÷		
//	Renewal '	•	Permit No	77-289
//	Modified	•		
		Eastgate	II Addition 🥻	
		(Name	of Facility)	
	This	permit hereby aut	horizes the applic	ant:
	*			
		City of Casper	,	
	·	(Last) c/o Casper Boa 136 W. 8th Str	nd of Public Utili reet	(Middle) ties
•			(Street or P.C	Box)
		Casper	Natrona	Wyoming 82601
	•	(City)	(County)	(State)
to con	struct, inst	all, or modify a	:Sewer & Water E	xtension 🗸
facili	ty located i	the City of C	Casper	
Iaciii	cy focused r		(Legal Descripti	on)
in the	County of _	Natrona		, in the State of
Wyomin	g. This per	mit shall be effe	ctive for a period	of 2 years
from t			ermit not to excee	
			. Authorized by:	
<u>W.</u> Q	land Or	ula D	Laberi E.	Jandin Director
и	Administ ater Quality		Wyoming Dept.	Director of Environmental Quality

September 1, 1977

Date of Issuance

This permit $\underline{\text{does not}}$ supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

/ <u>X</u> /	New	p.		
//	Renewal		Permit No7	7-290
<u> </u>	Modified			
_				
		Mannon Sausas	Diamani Custom	
			Disposal System of Facility)	
			• •	
	This	permit hereby aut	horizes the applica	int:
		Warner	Larry	L.
		(Last)	(First)	L. (Middle)
		P.O. Box 3558		
			(Street or P.O.	Box)
		Cheyenne	Laramie	Wyoming 82001
		(City)		(State)
	•			
to cor	nstruct, inst	all, or modify a	Septic Tank	
		in Section 22, T	•	
racili	ity located i	n Section 22, 1	(Legal Description	on)
in the	e County of _	Laramie		in the State of
			ative for a period	of 1 years
wyomii	ig. Ints ber	.mit shall be elle	ctive for a period	of 1 years
from t	the date of i	issuance of this p	ermit not to exceed	i five (5) years.
			•	
		•	Authorized by:	
_	00	n		- /
W,	llam!	Valand	Dobert 6,	Sundin
	Administ	1 \	Unomine Dont	Director of Environmental Quality
V	Water Quality	MINISTOIL	wyoming Debt.	or Environmental Adartes
				-
	Septemb	oer 1, 1977		•
	Date	of Issuance		

cc: Don Pack, City County Sanitarian, 315 W. 20th Street, Cheyenne, WY 82001

/ <u>X</u> /	New			
//	Renewal		Permit No	77-291
//	Modified			
	Ba	nks Miniature Golf	Course - Sewage Di	isposal
		(Name	of Facility)	
	This	permit hereby aut	horizes the applica	int:
				•
		Banks	Donald	Т,
		(Last)	(First)	(Middle)
		Route #2		
			(Street or P.O.	Box)
•		Douglas	Converse	Wyoming 82633
		(City)	(County)	(State)
		,	Sewage Disposal	
to con	struct, inst	call, or modify a		
facili	ty located i	n Section 7, T32	N, K/IW (Legal Descriptio	n)
d +1	Country of	Converse		
	County of _		<u> </u>	in the State of
Wyomin	g. This per	mit shall be effe	ctive for a period	of Zyears
from t	he date of i	ssuance of this pe	ermit not to exceed	five (5) years.
		•		
			Authorized by:	
0.00	Dia. P	Ja Op D	Laberr	E. Lundin
T.T	Administ ater Quality			Director f Environmental Quality
n	arei Anaiith	D T A TO TO!!	whoming mehr. o	I Divitonmental quarity
	Septe	ember 14, 1977		
		of Issuance		



Department of Environmental Quality Water Quality Division

HATHAWAY BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

September 1, 1977

Mr. John W. Alkire RFD 2, Box 259 Laramie, Wyoming 82070

SUBJECT: Application to Construct Wastewater

Facilities Ref. No. 77-292

Dear Mr. Alkire:

We have received the subject application, but cannot act on it at this time. As shown on the Plan Sheet, the proposed facility is a mobile home park. Other information in the application indicates that the facility will not be built for individual homes on individual lots. As such, the facility applied for does not constitute a "Small Wastewater System" but rather a commercial facility.

According to our regulations, such wastewater facilities must be designed by a professional engineer and complete plans and specifications must be submitted with the application. We will proceed with your application when we receive the necessary plans and specifications,

Yours truly,

Tom Mueller

Environmental Engineer

Water Quality Division

TM/jo

			•	
//	New		•	
//	Renewal		Permit No	77-293
/ <u>X</u> /	Modified			77-293 REF. 76-357R
_				
		•		
		<u>Westridge Se</u> (Name	cond Fxtension of Facility)	
	This p	ormit boroby out	harigae the applies	ant.
	IIIIS P	ermit hereby auc	horizes the applica	411C •
		Wenger (Last)	Robert (First)	(Middle)
		,		(middle)
		Savageton Ro	ute (Street or P.O.	. Box)
		C:17 - L L		
		Gillette (City)	Campbell (County)	Wyoming 82716 (State)
to com	nstruct, insta	11, or modify a	Water Distributi	on and Supply
		Section 37, T		
Lacii.	rty rocated in	00001011 07; 11	(Legal Description	on)
in the	e County of	Campbell	,	` , in the State of
			otive for a period	of <u>2</u> years
MAOUITI	ng. mis perm	it suali pe elle	ctive for a period	01 <u> </u>
from t	the date of is	suance of this p	ermit not to exceed	l five (5) years.
			Authorized by:	
		`	7-3	أر مس
	Min P()	ala	A CALLER	A. Minden
<i>کیلیڈڈ</i> ۔	Administr			Director
Ţ	Water Quality	Division	Wyoming Dept. o	of Environmental Quali
	August	15, 1977		

Date of Issuance cc: Plains Engineering, P.O. Box 2020, Gillette, WY 82716

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: V-2 Mine Fourth Settling Pond

ARCHITECT OR ENGINEER: Energy Development Company, P.O. Box 36, Hanna,

Wyoming 82327

WATER QUALITY DIVISION REFERENCE NUMBER: 77-294

William J. Garland REVIEWING ENGINEER: Tom Mueller, William L. Garland, P.E.

DATE OF REVIEW: 8-23-77

ACTION: NOT AUTHORIZED FOR CONSTRUCTION. SEE COMMENTS,

COMMENTS:

- 1. The plans must carry the signature of a professional engineer registered to practice in Wyoming.
- 2. A cross section of the new pond dike shall be submitted,
- 3. The dike will be along Big Ditch. What erosion protection will be necessary?
- There appears to be a cross connection between the make-up water from the pond (MW) and the existing well house. How will the well be protected from backflow?
- 5. Will any new or different waste be pumped to settling pond #1 through the Pond Return Water (PRW) line? If so, indicate its source, quantity, and waste characteristics.

// New
// Renewal Permit No. 77:-294R
// Modified
W-2 Mine Founth Settling Pond
(Name of Facility)
This permit hereby authorizes the applicant:
Energy Development Company
(Last) (First) (Middle) c/o Don Hartley P.O. Box 36
(Street or P.O. Box)
Hanna Carbon Wyoming 82327
(City) (County) (State)
to construct, install, or modify a
facility located in Section 23, T22N, R82W
(Legal Description)
in the County of, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.
Authorized by:
1000: 8000 Four Edundin
Administrator
Water Quality Division Wyoming Dept. of Environmental Quality
Santamban 22 1077
September 22, 1977 Date of Issuance

/ <u>x</u> /	New					
//	Renewal	•	Permit No.	77-29	5RRR	
//	Modified				•	
		Rivers West Phase (Name of	III Facility)		 -	
	This	permit hereby author	izes the appli	cant:		
		•				
		Radix, Inc.				
		(Last)	(First)		(Middl	e)
		Suite 230 - Weste	ern Resources	Buildi	ng	
			(Street or P.	0. Box	ĸ)	
		Casper	Natrona	·	Wyoming	82601
		(City)	(County)		(State)	
to 000	otruat inst	all, or modify a Wa	ter Distributi	on, Se	wage Col	lection /
	•					
facili	ty located i	n Section 15, T33	IN, KOUW Legal Descript	ion)		
			reger peserare			-
in the	County of _	Natrona		, in	the Stat	e of
Wyomin	g. This per	mit shall be effecti	ve for a perio	od of _	2	years
NOTE: exceed or add	Sewage load the rated p	ssuance of this perm ing to the Rivers Wes lant capacity unless tment capacity is pro	st Treatment P adequate exce	lant f ss cap eed to	rom Phas acity is	e III is not to demonstrated,
<u>(2002)</u> W	Administ ater Quality	\ 1	Wyoming Dept.	Dire of E	Sun ector nvironmen	din Quality

May 17, 1978

Date of Issuance

Nix Anderson - County Sanitarian
The Engineers, 644 West 14th, Casper, Wyoming 82601 cc:

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
Hathaway Office Building
Cheyenne, Wyoming 82002

PROJECT: River West Estates, Phase III - Water Distribution System,

Natrona County

ARCHITECT OR ENGINEER: Fluid Systems, Inc., P. O. Box 12190, El Paso,

Texas 79912

WATER QUALITY DIVISION REFERENCE NUMBER: 77-295RR

REVIEWING ENGINEER: Tom Mueller - William L. Garland, P.E.

DATE OF REVIEW: March 29, 1978

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS: SEWER SYSTEM

1). No infiltration specifications is included. Infiltration must be limited to 200 gal/in/mile/day, and the test method must be described.

Delian

- 2). Lamping specifications are required.
- 3). A drop manhole detail is required.
- 4). A service tap detail is required.
- 5). The sewer stretch between manholes 13 and 14 is greater than 400 feet. An additional manhole will be required.
- 6). Manhole 12 shall be constructed as a drop manhole.

WATER SYSTEM

Two additional water valves shall be placed on the main in Center Village Drive, one on either side of Indian Springs Drive. This will facilitate water service to Bailey Place, Henderson Creek Place, Indian Springs Drive and Kinzie Creek Place, in the event of a main break along Center Village Drive.

GENERAL

 Sewer lines along Center Village Drive as far as Indian Springs Drive, along all of Indian Springs Drive, and along the southern part of Cherokee Lane, were authorized by a previous permit (76-45). The present plans marked "as built", show somewhat different sewer elevations and slopes. Which drawings are actually correct. PROJECT: River West Estates, Phase III - Water Distribution System,

Natrona County

WATER QUALITY REFERENCE NUMBER: 77-295RR

GENERAL (CONT)

2). As mentioned on previous plan reviews, no further construction on Rivers West will be authorized until an adequate compliance schedule has been obtained for the installation of standby power at the sewage treatment plant.

cc: T. W. Pittman 1145 South Walcott Casper, Wyoming 82601

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Rivers West Estates, Phase Idl

ARCHITECT OR ENGINEER: James Bradley, P.E. - Fluid Systems, Inc., P.O. Box 12190, El Paso, Texas 79912

WATER QUALITY DIVISION REFERENCE NUMBER: 77-295

REVIEWING ENGINEER: Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: 9-26-77

ACTION: CONSTRUCTION IS NOT AUTHORIZED ;

COMMENTS:

- . Indicate minimum size and bearing area of thrust blocks.
- 2. Indicate ten (10) foot horizontal separation between water and sewer lines.
- 3. Submit basic design information for Water and Sewer.
- 4. Where are sewer specifications?
- 5. Indicate which lots will be developed as sewage diposal facilities dictate that only 412 lots can be developed.



Department of Environmental Quality Water Quality Division

HATHAWAY BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

November 29, 1977

T. W. Pittman 1145 S. Wolcott Casper, Wyoming 82601

Dear Mr. Pittman:

This office has received plans and specifications for the Phase III extension of Rivers West Estates.

The original sewage system received (76-128) did not have many of the street sections laid out for sewer. The plans which you submitted last week are a complete layout for Phase III. The Phase III water extension application is complete (77-295R).

The sewage treatment plant is authorized for 412 units. The complete Rivers West has 375 lots while Green Valley Mobile Home Park has 102 lots.

Before construction will be authorized on Phase III, the following conditions must be met:

- Standby power to the lift station and sewage treatment plant must be installed per the construction permit from this office.
- Indicate which 65 lots in Phase III will not be developed.

Should any questions arise, do not hesitate to contact us.

Jäke Strohman

Yours thul

Environmental Engineer Water Ouality Division

JS/jo

Brooks Water and Sewer District, Box 2080, Casper, Wyoming cc: William L. Garland, Administrator, Water Quality Division

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Faith Lutheran Church, NE4, SE4, Section 24, T33N, R100W,

Lander, Wyoming, Fremont County

ARCHITECT OR ENGINEER: Kenneth E. Temme, P.E., Chen and Associates, 1924 East

First Street, Casper, WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 77-297

REVIEWING ENGINEER: David W. Hill, Don Armstrong, P.E., William L. Garland, P.E.

DATE OF REVIEW: August 26, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1) Two copies of all plans and specifications are needed. One set shall be returned to you upon issuance of a permit.

- 2) Please indicate the depth to the seasonal high groundwater table in the evapotranspiration bed area. If the distance from the bottom of the evapotranspiration bed to the groundwater is more than four feet, a liner will not be required.
- 3) Our Chapter III Rules and Regulations, 1976, specifies that the gravel used in evapotranspiration beds must be $1\frac{1}{2}$ inch to $2\frac{1}{2}$ inches in size. Is there a reason for using the smaller sized gravel?
- 4) The sand in evapotranspiration beds is essential for proper capillary action. Our Chapter III Rules and Regulations, 1976 specifies one foot of gravel overlayed by two feet of sand. However, the two feet of gravel specified by your firm is satisfactory if you feel it will work.
- 5) Please submit specifications for leveling of the sand layer.
 The top of the sand must be level for proper operation. Mounding can be accomplished by using top soil and vegitation.
- 6) Please discuss the type of vegitation (grasses and/or shrubs) to be planted in the evapotranspiration beds. Also state the depth of the top soil level.
- 7) Discuss runoff from the site, and from the evapotranspiration bed area.

/ <u>X</u> /	New	,		
//	Renewal		Permit No. 7	7-297R
//	Modified			
		Faith Luther	ran Church	
		(Name of	Facility)	
	This	permit hereby author	rizes the applic	ant:
		Barber	David	J. (Pastor)
	•	(Last)	(First)	(Middle)
		1090 McDougall	,	
			(Street or P.O	. Box)
		Lander	Fremont	Wyoming 82520 .
	•	(City)	(County)	(State)
facili	ity located i		Legal Description	on)
in the	e County of _	Fremont		, in the State of
Wyomir	ng. This per	mit shall be effecti	ve for a period	-£ 2 waars
			.vc ror a perior	ofyears
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<u>W</u>	Administ Vater Quality	Ssuance of this perm	Authorized by:	

cc: Chen and Associates, 1924 East First Street, Attention: Kenneth E. Temme, P.E., Casper, WY 82601

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Afterris View Addition, Rawlins, Wyoming

ARCHITECT OR ENGINEER:

R & E Engineering, c/o James H. Carney, City Engineer,

P.O. Box 953, Rawlins, Wyoming 82301

WATER QUALITY DIVISION REFERENCE NUMBER:

77**-**299 🛊

REVIEWING ENGINEER: Tom

Tom Mueller, William L. Garlandsofue

DATE OF REVIEW: 8-25-77

ACTION: NOT AUTHORIZED FOR CONSTRUCTION, SEE COMMENTS.

COMMENTS:

- Water pipe material and the appropriate AWWA standard shall be specified. Fire hydrants and gate valves shall also meet AWWA standards.
- 2. VCP sewers shall meet ASTM standard C-700.
- Infiltration/Exfiltration shall be specified as 200 gallons/inchmile-day maximum for sewers.
- 4. Water mains shall be pressure and leak tested, and maximum allowable leakage shall be specified.
- 5. New water mains shall be disinfected according to AWWA standard C-601.
- Compaction to be achieved during backfill of both water and sewer mains shall be specified.
- 7. Service tap details shall be provided for both water and sewer.
- 8. Specifications shall be provided for protection of water mains at all water/sewer crossings.
- 9. Indicate the reason for installation of 8" water mains, to be supplied by 6" mains. This is generally poor practice and will not be allowed without good reason.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Big Eagle Mine, Equipment Maintenance Shop, SEL Section 2 & 11, #

ARCHITECT OR ENGINEER:

Bradley R. Mortensen, P.E., Lucky Mc Uranium Corp.,

Big Eagle Mine. P.O. Box 450. Jeffrey City, Wyoming 82310

P.E., William L. Garland, P.E.

WATER QUALITY DIVISION REFERENCE NUMBER: 1712-300

REVIEWING ENGINEER: David W. Hill, Don Armstrand,

DATE OF REVIEW: August 23, 1977

MOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1) All plans and specifications must be signed or sealed by an engineer registered in the State of Wyoming.

SANITARY WASTEWATER SYSTEM

- 2) Six inch lines must be used from the building to the septic tank.
- 3). The leach field must use no smaller than four inch lines.
- The leach line ends must be connected.
- 5) Supply complete septic tank details.
- 6) Supply sewer line slopes.
- 7) Sewer pipe specifications are needed.
- A "Permit to Construct" is also needed for the lube bay drain sump and wash house wastewater disposal systems. Complete plans and specifications are needed.